quality of working life

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Adapting to a Changing World

A Reader on Quality of Working Life

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FOREWORD

Managers, academics, union leaders concerned with the workplace are finding that many of yesterday's sure-fire solutions to personnel problems are no longer effective because of today's changing organizational needs. That theme pervades the readings in this second edition of "Adapting to a Changing World", published by the Quality of Working Life Unit of the Employment Relations and Conditions of Work Branch of Labour Canada.

This second volume is a follow-up to the 1978 edition, which is no longer available. The immense popularity of the first volume (over 60 000 copies were distributed) reflects the growing interest in QWL issues.

In this second edition we have assembled essays written by some of the "leading lights" in the QWL movement, many of whom are internationally known and respected for their contribution to the development and diffusion of QWL concepts. The essays examine, among other themes, societal changes in recent years and their impact on the workplace, QWL principles, their application and diffusion, as well as some of the challenges to which the QWL movement must respond.

Most of the articles have already appeared in other publications and we are grateful to authors and to these publications for having granted us permission to reproduce them. We hope they will be useful to people in business, labour, education and government who are concerned about making the work environment a better place to be.

André Déom
Assistant Deputy Minister
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QUALITY OF WORKING LIFE

by the Honorable Gerald A. Regan
Minister of Labour

The quality of the work experience is an issue that, for the most part, has taken a back seat to the hard questions of economics. However, there is a growing realization that even though we face multiple, interrelated difficulties, few areas offer as much hope for economic and social improvement in the future as the area of work restructuring.

The success of so many QWL experiments and the remarkable history of several worker-owned enterprises suggest to me that when work is a central human activity — requiring challenge, variety and involvement — rather than simply as a means of livelihood, the social, psychological and economic benefits become very evident.

Work helps to define the individual's role in society, helps to determine his or her identity. It is, to be sure, not the only way. But it remains a critical way.

The true direction of progress lies not in the elimination of human labour, but rather, in applying technological advance with the human element in the foreground so as to enhance the efficiency and the satisfaction of work, as opposed to eliminating it.

Work is not a mere means of survival, but an indispensable vehicle of self-discovery, or self-esteem.

As many who retire early discover, work, in itself, is as essential as the pay packet it earns.

The quality of working life movement, of which I like to consider myself a member, is really a kind of "liberation" movement. For, in the final analysis, what we are seeking is to undo the customs and systems and practices that stultify the human personality.

Just as the liberal reformers of a hundred and fifty years ago fought for a political and economic system that made men free, so, too, we are seeking an organization of work that facilitates and encourages, not stifles, people's aspirations for creative expression.

To those of us involved in the world of work, it is inconceivable that people should be considered as "factors of production", who are obliged to function as mere adjuncts of a machine, with no power to influence the decisions affecting their work environment.

Moreover, the growing impatience of the younger generation of workers with the constraints of traditional industrial processes, and the higher aspirations of today's better educated labour force give a degree of urgency to the quest for liberalized organizational arrangements.

Efforts to improve the quality of working life will also affect positively the collective bargaining process, in the sense that they will

encourage an atmosphere of creative problem-solving.

I know that all of us here are deeply committed to the industrial relations systems that have evolved in our countries, many have fought long and hard for the right of workers to negotiate collectively with employers and managers.

But our appreciation of, and solid commitment to conventional collective bargaining should not, and need not, deter us from looking at additional, complementary tools to help advance the quality of the work experience.

The development of our collective bargaining system contributed greatly to improvements in the work environment. But today a better educated and more creative work force calls for reforms that affect working conditions that require mechanisms beyond the periodic bargaining for renewal of a collective agreement with its preoccupation with monetary matters.

It is therefore important for all of us to be vigorous in pursuing the objectives of the quality of working life.

From the experience of my years in public life, I have come to the realization that a key to substantial resolution of many of our problems, economic and social, lies in the unleashing of the human personality.

This realization has been reinforced by my tenure as federal minister of labour. Among other things, this portfolio represents a kind of meeting place — a point of intersection, if you will — for the social and economic issues that confront Canada, and with minor variations, confront all western, industrialized countries.

I believe that in Labour Canada we are in an advantageous position to see the tangled web of interrelated problems that, at times, threaten to overwhelm us. But we are also in a position to see that Canadian workers possess untapped resources of vision, creativity and insight which can help bail us out of our predicament, if we have the will and the courage to tap those resources.

To those of us involved in the world of work, the message here is especially pertinent. For a rethinking of the way work is organized can make a major contribution toward the unleashing of human energies. It means a breaking down of the excessive division of labour and a democratization of the workplace, so that the rigidly hierarchical system becomes the exception rather than the rule. And it means a changed attitude toward the individual worker, from factor of production, easily replaceable, to responsible creative person with expertise to offer.

In addition to the restructuring of work, unleashing human energy requires a closer linkage between the world of work and the world of education. According to a recent report prepared for the Club of Rome:

> "Human potential is being artifically constrained and vastly underutilized."

If we could alter the traditional con-

ception of work so that our people could move in and out of their workplaces and educational institutions, we could better equip them not only for more democratic organizations, but also for the profound changes that are inevitable in western societies. And we would be removing a major source of frustration and job dissatisfaction.

On a more practical note, the movement toward making educational opportunities available to our workers will gather momentum because the economy will require it. The huge gap between the work to be done and the skilled trades available suggests that the function of education can no longer be made separate from the realities of the economy. Economic forces, alone, will push governments, employers and unions to more closely examine such social policies as paid educational leave.

The combination of workplace democracy with a broader interpretation of education represents a powerful thrust towards the unleashing of human energies.

I believe the quality of working life movement is critical because of the fact that certain, mutually reinforcing global trends — namely technology and bigness — threaten to smother the individual, unless we take measures to counteract them. Workplace democracy and job redesign comprise one such measure.

The introduction of new technology is almost inevitable, as is a considerable degree of bigness in industrial operations. What I am saying is that, unless we harmonize technology with human considerations, the voice of the individual will become inaudible, and the opportunities for personal growth will become fewer and fewer.

The late humanist, E.F. Schumacher, once observed that,

> "The type of work which modern technology is most successful in reducing or even eliminating is skillful, productive work of human hands, in touch with real materials of one kind or another".

On the verge of the micro-electronic revolution, we see that the prospect of more and more "deskilling" looms ever larger.

In a way, the damage may have already been done. For tremendous technological growth has convinced people in the Western world that work ideally belongs to machines, that progress means the elimination of labour, or at least the reduction of human input! As a result, we have tended to see leisure as the proper arena for exercising one's creativity.

The QWL movement, which tries to return "wholeness" to jobs, which takes a different view of work itself, and which seeks to make the machine fit the worker rather than vice versa, offers an alternative to the path of more technology at the expense of skilled work. By calling for greater workplace democracy, the QWL movement endeavours to put technology at the service of people, rather than people at the service of technology.

The QWL approach also provides mechanisms to deal with the trend to larger and larger economic units. Such innovations as autonomous

work groups can restore to the individual his or her sense of worth and purpose in a large organization. They can minimize the possibilities of depersonalization that usually accompany organizational growth.

In an era of huge, international corporations, when market competition has been reduced, the democratization of industry — from the bottom, up — should provide some degree of accountability, as well as better results on the work floor.

Obviously, some companies realize the gains of improving working conditions and are moving in that direction, but there are many others who blindly follow traditional production methods and pay no attention to the potential for improved productivity that would flow from better conditions and more involved workers.

Beyond the question of designing the workplace with people in mind, there is hard statistical evidence that the design and quality of a chair or a work bench and the type of lighting available can affect the productivity that can be achieved.

The importance of the quality of working life movement also stems from the need to return the element of craftsmanship to the workplace. An organization of work, based on QWL principles, will allow our workers to concentrate primarily on the quality of the product and the skill of its making.

The very word "craftsmanship" is synonymous with the triumph of quality over quantity, with the pursuit of excellence rather than mediocrity, and with the preference for human ingenuity over the assembly line.

People are demonstrating their need to create and for pride of workmanship. Thousands of men and women have given up traditional jobs to set up their own craft operations. Surveys on worker attitudes indicate that they want to have the resources to do a good job. And we all know of people who come home after work, exhausted from doing repetitive, fragmented jobs, only to spend their evenings making furniture, working on their cars, painting, or some such activity. Why? Because, here, they can be craftsmen: planning the work, focusing on quality, perfecting their skills, and deriving a sense of accomplishment. It is this mentality that employers and managers should encourage at the workplace.

It is still possible to organize work in such a way that it becomes meaningful, and calls out the talents and ingenuity of people. If we can commit ourselves to this ideal, I have no doubt as to the enormous benefits that will result.

The QWL movement favours human development in that it resolves one of the most glaring contradictions in society — namely, the contradiction that exists between democratic rights in society and autocratic rule at the workplace. Outside the shop, plant or office, workers are entitled to all the rights, freedoms, privileges and opportunities of a democratic and affluent society, and yet, when they enter their places of employment, they are expected to tolerate organizational structures that can only be described as authoritarian. It is as if there were a sign over the entrance that read: "Abandon all freedom all who enter here".

If we want to encourage our people to participate actively and meaningfully in questions of public policy, then we must afford them the opportunity to learn to participate. This must obviously occur in the places wherein they spend most of their waking hours. As the great thinker, John Stuart Mill, has written:

> "We do not learn to read or write, to ride or swim, by being told how to do it, but by doing it; so it is only by practising popular government on a limited scale, that people learn how to exercise it on a larger".

In unleashing the human personality, I believe that a "participatory ethic" at the workplace will go a long way toward doing just that, with tremendous rewards for our nations and the individuals who work in them.

These are some of my reasons for wanting to see the widespread application of QWL principles. Here in Canada, awareness of QWL values has greatly increased over the past few years. The quality of working life unit in my department has contributed to this awareness through conferences and workshops, publications, the provision of financial and technical assistance in support of QWL training and research, and the development of a network of qualified personnel.

The government's, and my own personal commitment to the quality of working life movement remain firm. In a climate of fiscal restraint, however, I am unable to do as much as might be desirable. I can say that the program is a priority for us and I would hope that we could expand its activities in the near future.

It is my hope, too, that the Canadian labour movement will become more receptive to the idea. For a variety of reasons, its reaction, in general, could not be described as enthusiastic. And it contrasted with the attitude of labour people in other countries. Consider, for instance, this statement of Jack Jones, former General Secretary of Britain's transport workers:

> "The important thing is that, on matters of policy, the workers should be involved in the actual making of decisions. Surely most people would like to see management and trade union representatives sitting down together working out ways to improve the use of manpower and machinery. That is collective bargaining of a new kind — and we would all benefit, because the more efficient our industries are, the greater the possibility of keeping prices down".

Victor Reuther, who, with his brothers Walter and Roy, founded one of the most forward-looking unions in North America said:

> "It strikes at a very crucial question, the right of workers to participate in some of the corporate decision-making that bears so heavily on our own lives and the lives of our children. The Swedes call it a search to humanize industry. The Germans call it co-determination or joint management. By whatever name it is called, we will have to search for an answer".

To be sure, there are some unions in Canada who have been quite active in this area for some time. In Quebec, the Centrale des syndicats

démocratiques has been a strong and articulate advocate of QWL principles. Some other unions, such as the Public Service Alliance and the Energy and Chemical Workers, have also been active.

A recent visit to Western Europe by a CLC delegation to study QWL developments suggests that, perhaps, the CLC may become more involved. I hope so, because I can't help but feel that organized labour — indeed, Canadian society — would be missing out on something very valuable if it did not join the QWL movement wholeheartedly.

All those concerned about work have a critical role to play in the global effort to mobilize human capacities. If we can improve the quality of the work experience, I have no doubt that we shall be making a major contribution to the unleashing of the human personality.

From an address to Colloque 80:

Conception des espaces industriels et amélioration des conditions de travail
Faculté de l'aménagement
Université de Montréal
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CHANGING ATTITUDES TO WORK AND LIFE STYLES

by Jerome M. Rosow
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Understanding human behavior is our everyday job. But it continues to puzzle and confound us, possibly because we are only human ourselves — or possibly because we lose touch with our sense of identity and our ability to understand ourselves. Finding it so difficult to understand ourselves, it is natural that we should not understand everyone else.

It is presumptuous, therefore, to seek to explain and rationalize the changing attitudes of Americans towards work and life styles. Given the limits of time and knowledge, I shall address a selected number of areas in an effort to shed a bit of light on what seems to be going on around us. The discussion will consider the following:

- Challenge to authority
- Decline in confidence in institutions
- Resistance to change
- Changing attitudes towards work
- Work and the family
- Society changing faster than the workplace.

CHALLENGE TO AUTHORITY

During the 1960s, the United States and other Western societies experienced a so-called youth counter-culture movement. Many of the traditionally radical attitudes of youth were intensified by a concern over the environment and a revulsion against war. The revolution in social values has continued, so that the ideas originally advanced by a comparatively small number of students are now embraced by millions of young people in mainstream America.

As a by-product of these fundamental changes, American young people have changed their attitude towards authority. In 1969 almost 70 percent of the young accepted authority with few reservations. Now, 70 percent say that they need not take orders from a supervisor at work if they disagree with the orders. The permissive society in the West has fostered a change in authority roles. We have seen this change in the schools, where the young openly disagree with and challenge their teachers. In fact, during 1976 approximately 65 000 teachers were physically attacked in their classrooms. We have witnessed changes in the family, with traditional authority figures adopting more open relationships with their children in order to achieve consent and stability. These more permissive values have

carried over into marriage; the husband-wife relationship is undergoing transformation.

It is to be expected that these changes in authority relationships would spread to the workplace. But even as younger, more educated workers resent authoritarianism, they are not opposed to the proper exercise of authority. This distinction is quite important. They respect authority properly exercised with restraint and with rationality, but reject authority which is abusive or arbitrary. This poses a challenge for large bureaucratic organizations to rationalize their work procedures and learn the act of managing with consent.

DECLINE OF CONFIDENCE IN INSTITUTIONS

In the United States, the decline in respect for authority is related to a growing mistrust of institutions. Business, government, labor, the church and the military have all fallen in the general public's esteem. This feeling of mistrust is most pronounced with regard to the Presidency and big business, the two American institutions that are believed to possess the greatest power in the country. Big business has seen the percentage of mistrust of corporations rise from 30 percent in 1968 to 70 percent by 1975. In fact, by 1975 nine out of ten United States citizens expressed a general mistrust of "those in power," covering business, government and most national institutions. Some of this same cynicism is reflected in Western European countries.

As recently as the mid-1960s, American big business enjoyed a reputation for unmatched industrial know-how and the technological achievement. This image of relative infallibility was badly shaken by the financial failures of several huge corporations. Business suffered post-Watergate shocks when hundreds of companies were cited for illegal political contributions. In addition, the general mistrust toward big business is no longer limited to the public at large, but also applies to managerial employees. In one recent study, for example, it was found that more than two-thirds of management within large organizations do not believe or support the advertising programs of their own companies.

CORPORATE ETHICS

When a cherished institution falls from grace; when directors are dismissed or charged with civil suits and found guilty; when the ethics of the corporations are brought into question, what happens to attitudes and loyalties of its own members? Employees are the first line of defense. Yet instead of acting in this capacity, many feel that they are the last to know.

In contemporary terms of "corporate social responsibility," the private corporation recognizes that in addition to its basic economic role, it must be responsive to consumers, to the environment, and to its own employees. Insofar as any of these have been badly neglected or subordinated to economic pressures and profit goals, they weaken public support for business as an institution, especially for companies which have violated the moral code.

At a time when institutions are struggling to regain public support and sustain confidence, they have a new opportunity. Employees are basically social beings with a strong gregarious need. People are drawn to work by both economic and social needs. Employees identify with the company; they have a natural desire to belong and to be a part of the work group, the department, and the large organization. Their loyalties are reinforced by job security needs.

It is estimated in the United States census that 32 percent of American workers are single (up from 27 percent in 1950), divorced, separated, widowed, or never married. Loneliness is becoming one of the most characteristic problems faced by a growing proportion of the labor force. The weakening of the American family reinforces this trend.

The decline of the family, the church, and the small community has increased the importance of the workplace for providing social support and a sense of involvement with other people in a common enterprise — in general, for making life more meaningful.

RESISTANCE TO CHANGE

Industrial workers dislike and fear change. Most of us, in our normal day-to-day activities, are sensitive to change; we are uncomfortable with a disruption of our established routines. For example, people find it difficult to change a commuting pattern. Within the workplace, change introduces the unknown. Since the individual worker has a limited degree of control over his work and his future, it is difficult to accept change without experiencing a sense of insecurity. Usually, workers feel that change imposed from above is intended to meet the goals of management, to increase production or to reduce costs, rather than to improve working conditions, reduce stress or increase opportunity, pay and security.

Many students of Japanese labor relations believe that the strong employment security provided by the individual employer has contributed to high growth in plant productivity. Since employees in Japan feel secure and essentially have lifetime employment, they do not resist change.

THE FULL EMPLOYMENT PHILOSOPHY

By contrast, in other industrial nations new technology and production processes often displace some of the workforce. Also, external economic forces of competition and cyclical declines threaten layoffs. Thus, in the short run, the penalties of change may outweigh the rewards this applies to workers and managers alike. Society has been searching for better ways of managing the human costs of change so that the full burden does not fall on the worker. Where the full employment philosophy is deeply embedded, as in Japan and Sweden, change is less threatening.

Although we tend to think of workers as the principal obstacle to change, the fact is that supervisors and middle managers are often more of an obstacle. This is easy to understand, since they are often

caught in the middle in such situations. Supervisors rarely participate in the decisions to change, yet they are expected to carry out the change. Further, they themselves are threatened by the new and unknown and are often as "insecure" as the average workers.

CHANGING ATTITUDES TOWARD WORK

The work ethic had its origins in the beginnings of Western Civilization. The early Greeks regarded work as a curse. It suggested drudgery, heavy-heartedness and exhaustion. For the Hebrews it was regarded as an atonement for sin. The early Christians followed this concept — work was considered as an act of expiation. They also looked to work as a means of spreading charity and to share with the needy as a rationalization for the accumulation of worldly goods.

THE POSTRELIGIOUS SOCIETY

Protestantism injected moral meanings into the work ethic when Luther conceived of work as a way to serve God, indeed as the best way. (Luther's influence continues in Switzerland to this day. In a recent public referendum, the people preferred to remain on a 45-hour week instead of going to 40 hours.) Calvin added to this by considering dislike of work as the road to damnation, because work is, in effect, "God's work," and men of all stations must work unceasingly.

The industrial revolution was fortified by the work ethic with its explicit religious and moral connotations. People today, however, are not as prepared to tolerate adverse conditions, hard, unrewarding work, and self-sacrifice for rewards in an afterlife. This is not an anti-religion view, but rather is supported by the increased knowledge of the vastness of the universe and the growing skepticism about the immortality of man. Thus the deferred gratification of pleasure drives is less acceptable, less rational. Hedonism, defined as: "the gratification of pleasure-seeking instincts," is more in vogue. The "now" generation is a self-explanatory slogan. Young and middle-aged alike no longer accept work as a process of atonement or even as a self-contained whole goal in life.

LESS DEDICATION TO WORK

In 1973, eight out of every ten American students believed that "it's very important to do any job well." Daniel Yankelovich's attitude surveys of youth have revealed consistently that the work ethic is strong and alive, despite the revolution in social values. However, youth's appraisal of the traditional rewards of hard work has certainly changed. In 1967, a 69 percent majority answered "Yes" to the question: "Does hard work always pay off?" By 1975, more than 75 percent of American students answered this question "No." This view of the world of work is probably a reflection of attitudes at home, and may also be a more realistic insight that many jobs are routine, dull and boring, and do not challenge the talents of the average worker.

Leaves of absence are growing more common as workers seek a

change from the work cycle. While paid sabbaticals are granted by only 16 of 434 companies surveyed by Hay Associates (1977), nine out of ten of these companies offer unpaid leaves. Organizations are responding to employees' demands for a career pause without a break in tenure.

WORK VERSUS THE LEISURE SOCIETY

Work is increasingly challenged by the leisure society. Whereas the work week has remained relatively stable over the past three decades, people are generally more attracted to leisurely pursuits. When work and leisure are compared as sources of satisfaction, only one out of five people (21 percent) state that work means more to them than leisure. The majority (60 percent) say that while they enjoy their work, it is not their major source of satisfaction. The remaining 19 percent are so exhausted by work demands that they cannot conceive of it as even a minor source of satisfaction.

A recent unpublished manuscript reveals striking findings in Sweden. When Swedish men 18 to 55 years of age were asked in 1955, "What gives your life the most meaning — your family, your work or your leisure?," only 13 percent said "leisure," 33 percent stated "work," and 45 percent answered that their "family" gave their life the most meaning.

In 1977 the same question addressed to a new cross-section of Swedish men found that the percentage of men citing work as the main source of meaning in life was cut in half — from 33 percent to 17 percent. Family life declined a bit — 45 percent to 41 percent. But leisure as a source of meaning more than doubled, from 13 percent to 27 percent.

Sweden is currently experiencing unusually high absenteeism, ranging from 15 percent to 30 percent — another manifestation of negative attitudes toward work.

This dramatic shift in attitudes is not easy to explain and does not suggest that the new breed of workers is less motivated. It does reflect cynicism, higher expectations, and a questioning attitude toward the value of work. It also places a more difficult obstacle in the path of managers. Developing employee commitment to the job and to the organization is tough.

Many executives are also seeking a new balance between work and off-the-job life. Fewer executives take their attache cases home every night, thus insuring that their personal time is free from company work obligations.

PARTICIPATION IN DECISIONS

Over the past ten years, there has been a remarkable increase in employee expectations for participation in decisions that affect their jobs. In 1977, 54 percent of the public said they felt they had a right to take part in decisions affecting their jobs. More than 62 percent of younger workers expressed this view.

Decision making is one of the more subtle, newer issues. As the British put it so aptly: "It is climbing up a

slippery slope." Workers want, and believe they deserve, more. This desire is specific to the immediate arena of the job and work-related issues. It does not reach up to executive decisions or corporate-wide decisions, which extend beyond the individual employee's ken or beyond his limited view of the organization.

Nevertheless, despite the relatively narrow dimensions of the decision field, the art of sharing decisions is resisted by most managers. The issue is joined slowly, if at all. Authority and responsibility tend to rise to the top, not drift down to the bottom. Managers cherish authority and worry about too much responsibility. The former is usually considered too little and the latter too much. Preoccupations with responsibility limits any impulse to delegate or share authority for decisions.

This is the real dilemma. Despite the rather limited horizon of employee decision-making demands, the modern organization has not been structured for their accommodation. Further, participation in decision making is an art form and requires a genuine set of motives and a basic belief in the ultimate value of the individual. In other words, management needs to place a higher value upon the individual to see his thinking as a resource and to open up to his ideas. Without giving away any authority, management must share some responsibility.

Current demands for participation in decisions that affect individuals' lives are evident in schools, universities, welfare agencies, prisons, hospitals, offices, factories, the military forces, and in the church. If these demands succeed, they will bring great changes in a wide variety of institutions.

OLDER WORKERS

We consider the workers over 50 dedicated to the work ethic. To determine whether or not the cynicism found in younger workers was purely a function of age, workers over age 55 were asked whether they felt a sense of achievement and reward when looking back over their careers. The majority answered "No" — hard work did not pay off.

Then they were asked, what would you like to change? They replied "Nothing. We are past that point in our working careers — it's too late — we would rather retire and leave the battleground to someone younger who may have sufficient years ahead to change the system."

Retirement data confirm this opinion. The labor force participation rate of men aged 55 to 64 has declined sharply, from 89 percent in 1947 to 80 percent in 1977. This withdrawal of men in the prime of their working lives is remarkable. Some are forced out, some are bought out, and others want out. Few reenter, especially when retirement income is adequate. One may also note that women are rushing in to seek the jobs which men no longer want. Female participation rates increased from 34 percent to 47 percent.

COMPARISON WITH JAPAN

Japan is considered the model industrial state in terms of produc-

tivity. The work ethic there is often contrasted to that of the United States, which is considered a country with declining work values. But according to a recent Office for Economic Cooperation and Development study (October '76), there are significant changes in attitudes among Japanese workers that reflect a falling off in traditional devotion to work and the enterprise, especially among the young.

- Over four decades (from 1930 to 1968), the number of Japanese who concurred with the statement, "Don't think about money or fame; just live a life that suits your own tastes," increased from 11 to 51 percent. During the same period, the proportion of those agreeing that it was wise to "resist all evils in the world and live a pure and just life" dropped from 30 percent to only 10 percent.
- A survey of workers' attitudes toward life indicated that 40 percent valued work more highly than family life or leisure, but for males under 20 and females under 30, leisure was most highly valued.
- In 1974, 60 percent of workers surveyed were not satisfied with their wages, and 25 percent were not happy with their work. Additionally, 40 percent wanted to change jobs.

Japan teaches us that the changing attitudes of the young are not peculiar to the United States, and that work must compete with other values.

ERA OF RISING ENTITLEMENTS

Western industrialized societies have been riding the crest of economic growth. Although this crest peaked in 1974, it has not diminished deep-seated and almost universal expectations of a rising standard of living.

Enjoying a burst of consumer goods production and a progressive rise in purchasing power, Europeans and Americans alike have cultivated the desire for more and more, and for a better life. Consumer attitudes have been sharpened by the production and distribution of massive quantities of attractive goods. These include quick-frozen convenience foods and labor-saving machines in the home; the private automobile, including the two-car and three-car family; year-round and summer homes, and increased leisure and glamorous vacations. A significant advance in the real standard of living has been almost uninterrupted since World War II. The new generation of workers and their children were conditioned by this boom economy; they have perceived these advantages as normal.

Now these expectations have become entitlements. Western governments have expanded social services in health, welfare, housing and education, and have provided broad income transfer programs to shelter individuals and families against economic hardship, unemployment, illness, and aging. People in Western societies have learned to believe that they are "entitled" to the direct allocation of resources through their political systems as a supplement to the economic system. The worldwide recession of 1974 and 1975, which is still persisting in many countries, did not diminish these expectations. In fact, many political programs expanded

as the economic system fell into recession. The economic slowdown, rising unemployment, and problems of inflation are seen as temporary phenomena which introduce, at worst, a pause in the fulfillment of the era of rising entitlements. For example, in 1975, more than 56 percent of the American public expressed the view that, as a matter of right, they are entitled to an ever-increasing standard of living.

Today's workers are members of the permissive and affluent society. They have rarely experienced economic hardship. Better educated, with even higher expectations for their careers, they want more, faster. They are asking for advancement in money and status and expect more openness, more communication and more involvement — as entitlements, not as something to be earned over many years of loyal service.

QUALITY OF WORKING LIFE

Changing attitudes toward work, combined with the revolution in social values, have raised new interest in improving the quality of working life. The expectations and aspirations of workers require a social agenda with heavy economic undertones. It involves a shift away from authoritarian concepts of management towards one which places a higher value on individual employees and groups as critical factors in work efficiency.

This new agenda stands in sharp contrast to the dominant contemporary practices of work organization. Many terms have been used to describe the newer concepts. They include worker participation, participative management, industrial democracy, autonomous work groups and work teams, humanization of work, quality of working life, job redesign, and job enrichment.

It is increasingly thought that the more useful and lasting changes will be those which embrace the entire environment of work and seek to achieve a systematic restructuring of the organization and of work relationships. However, it does not require a restructuring of the process of production per se.

As a comprehensive concept, the quality of working life encompasses such matters as the organization of work (i.e. of the production process itself), hierarchical structures, relations with workmates, the social situation within the firm, the working environment, participation in decision-making at all levels, and opportunities for self-development and advancement.

This is not a passing fad. Nor is it a straw man created by the media or the professors. It is a new and genuine agenda for the future. It presents a new language for speaking directly to the expectations of workers in terms which address their needs.

Employment policies and operating practices can accommodate the rising expectations of employees. Employees desire opportunity, participation, and use of their potential. This is a universal human need. Workers want to learn, to receive training, and to develop on the job. They want a more meaningful participation in decisions which affect their work. Such participation can be linked to productive goals; it

need not become an undermining of authority or a dilution of management control. Under proper conditions, employee participation increases motivation and builds a commitment to the goals of the enterprise. The social interaction is also important. Where competition, rivalry, and secrecy prevail, employees are less likely to cooperate and their engagement in effective group efforts is prevented.

Workers wish to compete for recognition, training, promotion, and advancement, especially at the lower levels. This aspiration is compatible with the needs of every organization to utilize and to upgrade its own human resources.

WORK AND THE FAMILY

DIVORCE

The rising divorce rate is growing in visibility. Dr. Kenneth Keniston of MIT estimates that two out of five children born in the 1970s will spend some time in a one-parent family. The 1975 statistics reveal that there were one million divorces versus two million new marriages. Many states have responded to the divorce ethic with more and more liberal laws, including provisions for no-fault divorces. The social stigma and religious taboos against divorce are disappearing in many sectors of the country. Some people are talking about the first marriage as a trial run. Yet the data show that, whereas 35 percent of first marriages end in divorce, over 50 percent of second marriages end in divorce. Clearly, then, divorce is not a step towards stability of the family in the second-level experience.

ONE-PARENT FAMILIES

Nine million children under 18 are now being raised in one-parent families. Most of these families are headed by women, and one-third of these children are under age six. The number of single-parent families has increased by 31 percent, almost three times the rate of growth in two-parent families. In fact, there are now 2.4 million one-parent families versus 2.9 million nuclear families. Single-parent families are now almost 10 percent of the total, and are growing rapidly. Our best estimates show that there are fewer than one million places in child care facilities in the United States, with more than six million children under age six in families with working mothers. The one-parent family, the high divorce rates, and the growth of single-parent households all point to serious problems in child raising, and reveal the stress between the needs of the family internally and the needs of the parent to generate income to support the family. In the conventional nuclear family, headed by a male breadwinner, there is limited competition between the role of the breadwinner and the role of the homemaker. In the single-parent family, homemaking is weakened by the stress of full-time, year-round employment.

MULTIPLE-WORKER FAMILIES

During the period from 1950 to 1975, the proportion of families with two or more workers rose from 36 percent to 47 percent. Just about half of all the 46 million husband/wife families has a working wife. The economic pressures of inflation,

rising taxes, and costs of education have exerted the greatest force in pushing women to work. Almost 75 percent of all working wives work full-time, year-round, and six out of ten wives with children aged 6-17 worked in 1974.

Working wives contributed 38 percent of median family income of $17 500. Where the husband was the sole breadwinner, the median income was only $14 400. Husband/wife working has become the most obvious answer of the American family to pressures of inflation and the rising expectations of the American family.

WORKPLACE IMPLICATIONS

The multiple-worker family and the growing involvement of women in the workplace have a number of implications. First among these is the growing popularity and need for flexible working hours, including staggered hours, flextime, and shorter work weeks. Many of these changes can be accommodated by employers without any capital investment, with minimum effect on present production programs, and with payouts in reduced absenteeism, lower turnover, and higher productivity.

Also implicit is the growing demand for part-time jobs for women, younger workers, and older workers. We shall witness increasing husband/wife career conflicts and maladjustments. Many companies have revised their policies to permit the employment of both husbands and wives without regard to previous restrictions on nepotism, which are vestiges of the depression. Transfers and management development programs must increase in flexibility to recognize the combined needs of both members of the family, whose careers are important to the firm as well as to the family.

There is a very minor degree of experimentation with shared jobs, where husbands and wives with the same profession share one job.

Sweden has recognized the impact of husband/wife working by providing seven months' maternity leave, which can be shared by either parent with relatively free choice. This is an experiment worth watching; it reflects the concern of society with this problem.

There is also growing evidence that women are more immune to business recessions. They are more insulated because they are concentrated in retail trade and service industries, which are less subject to cyclical fluctuations. Only 6 percent of women work in construction and 20 percent in durable goods manufacturing.

SOCIETY IS CHANGING FASTER THAN THE WORKPLACE

Changes in Western society have been more rapid and penetrating than have been changes within the workplace. After all, changes in mores, folkways, and laws have reflected the revolution in social values. Society's changing attitudes toward legal abortions, youth, divorce, the use of drugs, women's rights, civil rights for minorities, and more casual sexual mores — all of these present an imposing and

almost unbelievable agenda of sweeping social change.

Of course, the nature and the rapidity of these changes have posed a moral dilemma for many. There are those who long for a return to the old values of yesteryear and are puzzled and angry about the social revolution. We witness this daily in the public debates on homosexuality, the Equal Rights Amendment to the Constitution, civil rights for minorities, pornography, and many other social issues.

By contrast, conditions have remained relatively static in the workplace. The large bureaucracies of government, industry, the church, universities, and the military all remain relatively resistant to change. Authoritarian rules and customs are deeply embedded and are rather sheltered and secure from the outside environment.

Many large organizations are almost self-contained societies. They are relatively immune to external social forces. Sheltered from the winds and torrents of social change, the organization leaders continue to respond best to the internal sounds of the cloistered world in which they work. Corporate leadership is angered and confused by the external noises, and views them as an unwelcome disruption of the relative tranquility of the past and as a constant threat to efficiency. Changes in American moral and social values have been rapid and penetrating over the past decade. In contrast, large organizations are slow to change. Thus an institutional lag persists. Executive leadership in these vital organizations needs to reduce this time-lag and bring organizations into a more harmonious relationship with society and its values.

The concern for human values must be focused on the workplace: First, because individuals devote the greater part of their mature lifetimes to this occupation. Time, energy, and physical and mental resources are engaged in this endeavor. Second, our freedom, growth, and standard of life depend upon earned income. Third, the role of breadwinner is fundamental to the family and to self-respect in the society. Fourth, human resources are the only natural resources which are not in scarce supply. The fifth and most important reason for this focus on the workplace is that production, industrial growth, and technological advances are not ends in themselves; they are simply a means to an end — namely, to improve the quality of life for all.

SUMMARY

I would make the following general observations:

- The permissive society has fostered a change in authority roles. The young workers have higher expectations and place intelligent limits upon the exercise of authority over their lives.
- The general mistrust toward big business is no longer limited to the public at large. Now it also appears to an increasing degree in employees at all levels who are puzzled at or critical of the behavior of their own employer.
- Employees, supervisors and managers all dislike and fear

change. As long as the risks and dangers of change outweigh the rewards, they will suspect and resist it.

- Changing attitudes toward work reflect the values of a post-religious society which no longer views work as punishment with a reward in the afterlife.

- Youth reflects much less commitment to the work ethic and greater cynicism in many areas. Even managers and executives have been searching for a better balance between work goals and life goals. Work is increasingly challenged by the leisure society.

- Older workers do not look retrospectively upon their careers with a real sense of achievement. Instead of seeking to change the system, they have chosen to seek the escape route of early retirement.

- Significant attitude changes in Japan teach us that the American young are not a peculiar breed and that for the first time work must compete with other personal values.

- The era of using entitlements has created a feeling that jobs, income, and a rising standard of life are no longer privileges, but instead are a secured right.

- Changing attitudes toward work, combined with the revolution in social values, have led to a new interest in improving the quality of working life as the long term answer to work motivation problems.

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SOCIETAL CHANGE AND WORK

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Another decade has passed — the Seventies are over. For most people, the Seventies were a welcome relief from the decade earlier. The Sixties with their student revolts, flower children, drugs, rock festivals, concern for ecology, riots, Vietnam War, fear of the so-called "military-industrial complex," and the relaxation of moral standards (and standards of almost any kind, for that matter) all combined in such a way as to make it a very stormy period. By contrast, the Seventies have slipped silently by, almost like a lull after the storm.

But a more careful analysis of the Seventies is likely to reveal that the apparent calm is a somewhat deceptive characterization in that some significant developments and changes have occurred. Not the least of these developments are shifts in thinking and behaviour that are happening in the workplace. This paper has as its focus change — change that alters the conditions under which people work.

I shall examine the nature of these innovations across a wide spectrum of the dimensions of work and place these in the particular context of Canada. The result should be to develop an understanding of the diversity of the changes that are occurring and the extent to which these currently are present in Canada.

No organization operates in a vacuum. As part of a larger society, organizations are influenced by numerous elements in their environments. Obvious examples of these influences include other organizations such as their suppliers or customers, governments, and the public in general. A legacy of the Sixties has been a shift in certain of people's attitudes and values about work. These, in combination with increasing levels of education in the labour force, are leading to questions about some of the established patterns and practices of work organizations.

Since people bring into their work settings attitudes and beliefs that govern their work behaviours, we should review briefly some of the more dominant expectations people now have about their work. This will provide a context in which to assess the innovations we shall describe later that are occurring in Canada on the people side of work operations.

SOCIETY TODAY

EDUCATION AND THE LABOUR FORCE

Today's labour force is quite different in a number of ways from workers of earlier times. One of the

most significant variances is in their educational levels. In 1941, two-thirds of the labour force had completed only Grade 8 or less. Today, a mere one person in every ten has such a low level of education. And further, over 30% have education or training beyond high school.

What consequences might these higher levels of education have for the work environment? One major outcome is that people may tend to have correspondingly higher expectations about the nature of their work. A recent large national study, for instance, found that many Canadians rate interesting and challenging work as the most important attribute they look for in their jobs. They apparently assume that their advanced education and training have given them reasonable problem-solving abilities and, as a result, attach a higher value to work that provides them with such opportunities.

In contrast with these expectations, the reality of many work situations is that work processes have been broken up into sometimes narrow, highly specialized tasks lacking in much interest or challenge. It frequently is, as Fred Herzberg has noted, a case of society "...educating people more and more to do less and less."

Another factor associated with increased education and to some extent the lessons of confrontation learned in the Sixties, is a widespread general lessening of respect for established authority. People at all levels in our society seem more ready to question authority. Unquestioned respect for traditions and authority is now rare. We see this in the difficulties many parents experience with their teenage children; the apparent permissiveness in some of our schools and universities with many courses as options and very few requirements; law enforcement agencies have had a tough time with the police being referred to as "pigs," and so on. These are but a few examples of the lessening of respect for authority in our society. In its place, more widespread participatory democracy now is seen to be the more acceptable alternative.

This development in the larger society often translates into people wanting more direct input into workplace decisions that ultimately will affect them. Conventional bureaucratic structures in organizations may not always be suited to demands for more broadly based participation by lower-level members.

WOMEN IN THE LABOUR FORCE

A second major change in today's labour force when compared with earlier periods is the dramatic increase in the number of working women. Almost four out of every ten people in the labour force are women. In fact, over half of the women fifteen years and older are in the labour force.

There are many reasons why this trend has come about. The women's liberation philosophy, for instance, has resulted in certain shifts in the accepted roles for women and this, in combination with their higher education levels and the generally buoyant job-creating economy, has meant the growing occurrence of

women as a more significant component of the labour force.

It should be noted that a sizable portion of working women are married and, as a result, almost half of the labour force is made up of working couples. These two-income family situations may allow either or both participants to take a more flexible view of their work. That is, with two in the family working, dependence on a single income for family maintenance may be less crucial and tolerance for supposedly undesirable features of the work milieu reduced. Such people, in other words, may be less willing to put up with questionable work demands because they are at less risk in objecting than would be someone whose job is the sole means of family support.

CONSUMERISM

Another pervasive societal attitude that should be noted is consumerism. The massive advertising blitzes we experience have conditioned many to want the good things and to expect them quickly. All guns of the advertisers have been trained on us as consumers to buy, buy, and buy some more.

In conjunction with this endless consumerism or what Galbraith calls our "disposable society" — throw away the old product and get the "new and improved" one — we have the explosive growth of credit. "Fly now and pay later," "easy credit terms available," and "no down payments and low monthly instalments" are typical of well-worn inducements to use credit. The once solidly entrenched view in our society (the Protestant Ethic) that if people work hard now, they will be able to obtain something they really want later appears to be giving way to a "get it now before you're too old to enjoy it" attitude.

Under such circumstances, work in itself may come to have little meaning for some people over and above the remuneration it provides.

QUALITY OF LIFE

One final development rooted in the Sixties that should be referred to is reflected best in a statement by the late American Civil Rights Leader, Martin Luther King. He once said, "It is not the quantity of life but the quality of life that counts." Typifying this concern for the quality of life are the views that big may not always be better, growth for its own sake may not always be desirable, and so on. These are the tenets of the quality of life perspective. Such a view suggests that humans in their rush to industrialize, to consume dwindling resources, may be sowing the seeds of their own destruction. They say that we should stop, look at what we are doing, where we are going, and attempt to introduce quality back into all facets of our lives. A current example would be the increased attention that nuclear power plants and their operations are attracting. It appears likely that this issue may emerge as a highly contentious and divisive one for the Eighties, much as the Vietnam War was in the Sixties.

From this perspective of quality of life, there are those who argue that a top priority should be devoting

time, energy and creative thought to ensuring a high level of quality in the work environment in which people spend significant portions of their lives.

Although painted with broad strokes, I have been suggesting that there have been important changes in our society — changes that have an impact on what people consider important — what they value in their lives. And further, these changes in the larger society are now very much a factor in today's workplace. They are just as much a factor in manufacturing and service industries as they are in government, as they are in resource industries.

The labour force is much more highly educated, it contains many more women, and younger people. These factors in a society oriented to consumerism and quality of life issues are likely to result in varying degrees of shifts in earlier and established value patterns about work.

As an indication of this, ask managers what their most difficult problems are and it is a rare response that does not include some reference to "people" problems. A number complain about high turnover and absenteeism rates, low productivity troubles, poor quality output, disinterest, and soaring grievance rates.

There is no doubt that perplexing undercurrents are present in today's workplace. Labour relations in some Canadian organizations are a mess. The gulf between the parties is widening and direct communication often has broken down. "Talk to my lawyer," is a common retort. Some observers attribute these problems to inflation. Inflation breeds greed, which generates aggressiveness in bargaining, and cooperation of any kind is replaced by continual conflict. Undoubtedly, inflation has been a factor responsible to a degree for some of the problems encountered in the workplace. But I would suggest that even more important influences are the major changes in society to which we have made reference and the failure of many organizations to adjust or adapt to these changes in circumstances. We cannot expect their impact to stop at the plant or site gate and they have not.

For example, the general lessening of respect for authority in society has certainly been felt in numerous work settings. Managers can no longer hide behind their positions of authority and expect people to obey their commands without question. People want to know why they are being asked to do something and how what they are being asked to do fits into the general scheme of things. We have long known about the ability of a workgroup to influence its members, and many managers and even union leaders today wonder who is managing whom. Supervision or leadership styles that are based on a notion that subordinates will respond dutifully simply because a supervisor is in a position of authority are fast fading in their effectiveness. Supervisors today increasingly need to know as much about people as they do about their technology.

Survey after survey has found that few Canadians are prepared to say that their work is not satisfying. But

when you probe deeper into people's feelings about their jobs and their views on their work, you find a different picture begins to emerge. A number of individuals report that their jobs are so dull and uninteresting that they are merely going through the motions. They put up with the monotony of the job or poor working conditions simply to get their pay so that they can do things off the job in which they have a genuine interest. Work for many is not a "central life interest"; it is instead an instrumental activity, just a means to an end where, with the money earned, they can do the non-work things that are of real interest.

Sometimes coupled with this instrumental view of work is a sense of resignation and cynicism. They may, for example, see various parts of their lives controlled by others. Governments make decisions on a host of issues affecting their lives; management makes decisions about their work; their unions make decisions about their pay and hours of work. All of these decisions directly affecting them are made at a distance with minimal input from them. As a result, these individual feelings of powerlessness increasingly appear to result in a tendency to withdraw, where one makes a minimal commitment hoping for a maximal return.

There has been a great deal of concern in the last several years about what is happening in some of our work settings. People are asking, "Why do we seem to be pricing ourselves out of world markets?"; "Why do we have so many costly labour disputes?"; "Is the work ethic dead?". More and more people are beginning to reflect on these issues and query, "Isn't there a better way of doing things?". We pursue these issues in the next section.

AN APPROACH TO CHANGE

Whenever a work slowdown or stoppage results in public inconvenience, the response of Canadians is constant. A postal strike during the busy pre-Christmas Season, for example, or air traffic controllers working-to-rule at the peak of the summer holiday travel season sparks newspaper editorial writers to some of their finest prose in an almost unanimity of thought. The scenario is familiar with exclamations that our current labour relation systems are ineffectual and even bankrupt, and suggestions that radical changes are the only salvation. In pursuit of speedy solutions, they adopt the familiar Canadian tactic — the "B and B approach" — Borrow and Bandaids. What can we borrow from other societies that will offer a quick and painless solution to our problems?

Casting about for alternatives to our present system, one that almost always emerges in a favourable light is the European system of *industrial democracy*. Although there are numerous variations, industrial democracy is essentially a scheme that attempts to provide an organizational framework within which workers assume a more active role by participating with management in the joint operation of a corporation's or an establishment's affairs. Proponents of this approach to labour relations base their support on the view that *all*

members of an organization should be given a reasonable and a representative say in the control and direction of their destinies while at work. They argue that this control should be not only over the particular jobs at which they work, but over the larger organization as well. Whether on works councils or boards of directors, participatory control through democratic means is the central notion in this model.

Not only is industrial democracy seen to be more humane by offering greater opportunities for workers to maximize their individual potential, but it is argued that greater productive capacity and efficiency levels are attained, and labour peace results in dramatically fewer days lost through strikes, absenteeism, and turnovers. The successful economic resurgence of post-World War II West Germany and the labour relations' creativity of Norway and Sweden are cited as examples of the strength and successes of industrial democracy.

Worker participation in decision making is central to the foundations of industrial democracy models. If workers are given a chance to participate in decisions affecting them and their employing corporations, to exercise control or autonomy in their jobs, it is asserted that they will be more satisfied and more productive in their work. There is, of course, nothing new in this view. Over one hundred years ago in 1868, William Sylvis, President of the Iron Molders' International Union addressed the Union's Convention in Toronto and urged the delegates to "...abandon the whole system of strikes and make cooperation the foundation of our organization and the prime object of all of our effort." The Convention endorsed his ideas and his vision that these goals would be achieved through self-governing producers' cooperatives. And in at least the last thirty years, numerous research studies have tested a range of effects of participation and have found varying degrees of support for them.

With knowledge of the practical experience of industrial democracy in Europe and the general consistency of positive research findings on the effects of participation, why then has industrial democracy or variations of it not become more common place in North America and Canada? A key factor resulting in this situation, undoubtedly, is the long-standing philosophical underpinnings for each of labour's and management's roles. Management rights, for example, are firmly embedded in most collective agreements by virtue of traditions and precedents originally associated with ownership. Unions, on the other hand, are hesitant to step out of their conventional roles for fear of their vulnerability to co-optation.

These roles for labour and management in an adversary system of collective bargaining have had a long period in which to develop in the relative stability of North American societies. Canada and the United States have not experienced change to the same degree as many Twentieth Century European societies have through the disruptive influences of ideological struggles and the ravages of war. Unlike North America, this environ-

ment of change has led a number of European societies to re-examine many of their traditional institutions, including the conventional roles for labour and management. One result in some instances has been the experimentation with new working relationships as contained in industrial democracy models. Democracy as a means of governing a society's political system, where the people participate either directly or through elected representatives, has been applied in varying degrees to the governance of work systems.

But I believe that it is just as well there has not been a rush to speedy adoption of European models for North American situations. Too often there is the tendency to adopt a machine-like view of the people or social side of organizations. With machines or technologies, it is far easier to borrow from other countries. We may acquire the machine and as long as we follow the standardized specifications for its operation and maintenance, there is a high probability of a successful adoption. But cultural differences, differences in people's values and beliefs, make it very difficult, if not impossible, to standardize their attitudes and behaviours. As a result, we frequently find systems that work well in one culture are less effective in another.

It is my position, therefore, that there is *no one best way to organize* people at work. Instead, we should look to the underlying principles of others' experiences, judge their appropriateness to our own unique circumstances, and then develop procedures and arrangements that are best suited to our needs. Given the complexity of variables one is confronted with when working with people, and the added complexity of the social-technology interface, a contingency approach to innovation and development seems most appropriate. That is, assess the needs of each situation, relate to established principles and research findings, and then innovate or adjust in a manner appropriate to each unique set of circumstances.

If the contingency approach is to be effective, then we have need not only for knowledge of experiences in Europe and elsewhere, but more importantly, about what is happening in our own immediate surroundings.

Adapted by the Editor from *Human Resource Management, Changing Times in Alberta*, a report prepared by Terrence H. White for Alberta Labour, June 1979.

THE QUEBEC WHITE PAPER ON CULTURE AND QUALITY OF WORKING LIFE

In June of 1978, at the end of more than one year of reflection on the part of the entire Québec Government, the Minister for Cultural Development at the time, Mr. Camille Laurin, made public a White Paper on cultural development.

This White Paper proposes a comprehensive definition of culture: every dimension of the life of man and all of his relations with his environment are considered as cultural elements. Education, health, communications, leisure and the cinema, to mention only a few, are seen as an integral part of it. The White Paper by no means leaves work aside; in fact, Chapter IX deals specifically with it.

Work is perceived as an important cultural vehicle, as a point of contact between reality and the possibilities of expression and self-actualization which could be offered to the individual. After identifying a series of difficulties which still prevent self-actualization in one's work (i.e., the segmentation, fragmentation and bureaucratization of work), the White Paper postulates that the State might get involved to a greater extent, on the one hand in order to help reduce the alienation of youth resulting from the nature of the work offered to them, and, on the other hand, to encourage a greater democratization of society.

The White Paper then proposes two courses of action by which these goals might be achieved: (1) a gradual improvement of working conditions in co-operation with both the organizations and the trade unions involved, and (2) training programs for workers.

In that the first course of action proposed is definitely related to a philosophy involving improvements in the Quality of Working Life, the following paragraphs of the White Paper which deal with this subject are reproduced in full.

WORK WHICH IS OFTEN MEANINGLESS

"Since men and women expend the greater part of their energies in their daily work, they have a right to expect that the technological progress which characterizes industrial societies will help improve their working conditions.

And in many respects, these conditions have undergone major changes since the end of the last

World War: general rise in the standard of living, reduction in the hours of work, gradual elimination of burdensome and unpleasant aspects of jobs, etc.

On the other hand, mechanization and automation have brought about a deterioration in the conditions that give meaning to work. Excessive specialization and fragmentation of work result in jobs that are uninteresting and tedious, that require few qualifications and follow too rigid a pattern.

Division of labour, watering down of responsibility, and loss of self-sufficiency have all become features of the working world in the so-called developed societies. Monotony and impersonal supervision have become as prevalent in offices as in factories.

Under these circumstances, few are those who can fulfill themselves in their work, who can develop, who can use all their knowledge and skills and take pride in the work they do. We have handled technological improvements in such a way that we have reduced the contribution the worker makes to production, but have not freed him from the burdensome aspects of work.

Transformed into an accessory to a machine, or a cog of bureaucracy, he "does time" from 9 to 5 or on the night shift, all the while dreaming of escape. Either he does not know enough, or he gives in too easily: for many citizens, work is a kind of tax, payable in time, in return for which they acquire the resources they need so that afterwards they can really live.

And yet workers are better and better educated. Many studies done in industrialized countries show that young workers are looking for interesting and varied work that will enable them to use and develop their knowledge, put their talents to good use, take on responsibility and share in decision-making.

There is a major gap between the preparation (and aspirations) of the new work force and the capacity of the market to use the abilities of these workers. So it is not surprising to find that young workers are dissatisfied with the jobs they can find. Their reaction stems from the social values placed on their education, both in the family and in school. Their concern about personal development and the demands they make with regard to work correspond to desires and incentives that have been nourished since childhood.

Quite apart from the criticism and emotional reactions of some adults, the dissatisfaction of the young people reflects a tragic split between the working world on the one hand, and the world of education, the family and leisure on the other. The outlook of a person responsible for the training and education of children and adolescents is not the same as that of the person who has a certain power on the labour market.

This feeling of alienation when faced with work that has lost its meaning is naturally more acute for the worker who is better educated, more highly trained, more aware of his capabilities and possibilities. Since he has grown up in an environ-

ment radically different from that of his elders, he is less readily disposed to resignation and sacrifice. Moreover, he has resources for independance which were unknown a short time ago: government assistance programs, income of a spouse, family support for the younger ones, and so on.

Since the labour market cannot meet the outspoken demands of young workers in most industrialized countries, we can expect an increase in the kind of behaviour usually associated with frustration; absenteeism, unusually high turnover rate of young workers, initial unemployment, voluntary unemployment, and even withdrawal from the labour force. This also partly explains the drop in productivity that many observers have noted.

Workers in the 15- to 24-year age group make up about one-quarter of the active population. Their situation in the labour market gets worse every year, and the number without work is rising steadily. The influence of young workers on the behaviour of labour in general will grow because of their numbers, and also because they are merely living out the social values formulated by their elders.

For the latter, now more resigned, these values nevertheless represent the disappointed aspirations they hope to attain through their children. There are grounds for fearing that the expectations of the labour force may soon diverge so much from the general nature of the working world and the kind of jobs available that it will become impossible to reconcile them.

Changes in the working world will thus have to be made, not only to preserve and restore a social unity which is as essential as it is fragile, but also, more fundamentally, to give the worker a feeling of dignity and pride which comes from a mastery of his work and control of his environment.

Such a change implies neither rejection of the advantages of technological development nor nostalgia for a past that exalts indiscriminately the virtues of small-scale production by craftsmen. But we should recognize at once that the decline in meaningful work is very much part of the present operation of our production system.

In a society imbued with market values, work is essentially an aspect of a constantly expanding production process that pours an unending stream of goods onto the marketplace; the consumer must earn more and more money in order to satisfy the needs thus created, from which comes the production-consumption spiral with its by-products of indebtedness, work alienation, waste, and pollution.

This production model causes social tensions that are very keenly felt in many industrialized countries. Stubbornly pursued, it creates an impasse on three levels: energy, natural resources and the environment. Since there is no going back, we will have to innovate, modify present trends and habits, and achieve a better adjustment between people, work and production. This is a matter of economics, but also, and perhaps mainly, of culture and lifestyle.

Changing the working world to make it more truly human, while at the same time maintaining productivity and the competitive position of Québec industry and respecting the demands of the biophysical environment and our dwindling resources, is certainly no easy task. But this is nevertheless the challenge that we, and other nations, are faced with. New avenues must be explored; innovations must be sought and tested.

IMPROVING THE QUALITY OF WORKING LIFE

As a first step in creating a more humane working environment, we could look to the experiences of some industrialized countries. These point to modifications in the production process and in the general organization of work. Whatever they are called — job enrichment, autonomous or semi-autonomous production units, etc. — the experiments have been numerous and conclusive enough to warrant closer attention.

The federal government has invested one million dollars in setting up an institute to study the quality of working life; the Ontario government has set up a consultative committee to evaluate existing QWL (quality of working life) programs in Ontario.

A number of firms in Québec (Alcan, Steinberg, Air Canada, Imperial Tobacco, Northern Electric, etc.) have conducted similar experiments, and have assembled valuable documentation and expertise. Two university groups, one at the École des Hautes Études Commerciales and the other at McGill University, are doing research in the same field.

The necessary knowledge is available, the need for change in work organization has been unequivocally expressed by young workers, and in most cases (especially in the service sector, representing 65 percent of all jobs), production technology can be adapted to this new requirement. Moreover, despite the variety of conditions under which these experiments were carried out and the diversity of methodologies used to evaluate them, there seems to be unanimous agreement that productivity in the firms concerned did not suffer.

More fundamentally, the concept of improving the quality of working life is a direct challenge to the priority which hitherto has been accorded technology over the human being. The standard industrial production model has postulated the adaptation of man to the machine, and transformed technological imperatives into obstacles preventing the satisfaction of the most basic aspirations of the workers.

This model can now be challenged because of the very development of technology; our capacity for innovation is now sufficiently great that in most cases, the machine can be adapted to man. At the very least, we no longer need unthinkingly to impose the standard production model in the service sector where its need has never been demonstrated.

The Québec government is planning to assume a certain responsibility for improving the quality of working life. It believes it should accelerate

the process now under way and convince the various economic agents of its soundness. Aware of its duty with respect to problems that have been neglected for too long, it proposes to circulate suitable information, finance research projects in the field, and assemble Québec and foreign data on the quality of working life.

A DIFFERENT DIVISION OF LABOUR

Improving the quality of working life is a necessary first step, but by itself, it is not enough to deal with the problem of organization of work and production that in many respects fails to serve the purpose for which it was devised. Today a person has to work full time in a job, on a permanent basis and during fixed hours, if he wishes to be guaranteed job security and attractive fringe benefits. Any other working arrangement supposedly involves economic risks, and is discouraged.

There are few permanent part-time jobs, even though the labour force includes a substantial number of married women and mothers. Very little headway has been made in staggering working hours despite the considerable inconveniences (loss of time, stress, waste of energy, pollution) connected with outmoded working schedules.

If a firm, an industry or a major sector of the economy is in economic difficulty, the answer has been to lay off part of the labour force rather than reduce hours of work for all the people concerned. In short, current conceptions of employment too often work against flexibility in the division of labour.

A second approach could be a different division of work so that it would be more evenly distributed among the people. An equitable distribution of work among the citizens of a country is a social objective, whether work is considered a right or a burden.

This objective takes on even greater meaning when the inequities become blatant and particular groups are very hard hit. The high level of unemployment among young people is an example of these unacceptable inequalities; it is also evidence of the limited possibilities of the system for self-correction.

The same attention should now be given to a redistribution of income. Reducing hours of work, relaxing regulations respecting retirement age, and lengthening vacation periods are among the possibilities that should be studied.

In this field, innovation should be based on the demonstrated fact that technical progress now makes it possible to maintain and improve levels of production with a smaller work force, and surplus labour should be evenly distributed. Under present conditions, surplus labour is lost to society, and the unemployed worker is looked on as a person of reduced social worth. Our policies of dividing up wealth and effort should be better harmonized.

Encouraging individual choice in setting working hours meets the desire of young workers for more freedom and responsibility; moreover, it offers innumerable advantages in organizing daily life, especially in urban centres. There are many possibilities here that

have not been explored: providing permanent part-time work and work at home, flexibility in dividing up working hours on a weekly or annual basis, coordinating work and school hours, gradual retirement, etc.

CATCHING UP

These may seem to be bold objectives. But the fact is that Canada and Québec are considerably behind when it comes to working conditions. Paradoxically enough, in a society that is preoccupied with the physical health, material well-being and education of its citizens, we have scarcely begun to think about work as a means of personal development (or conversely, as a milieu responsible for worker alienation and loss of identity).

Thus, the various economic agents find themselves somewhat at a loss as to where to begin when it comes to drawing up specific plans for the problems we have just mentioned.

This situation has impelled the government to intervene in two ways. In the short term, in keeping with its responsibility in the vast field of personal rights and freedoms, it has begun amending laws and regulations dealing with worker health and safety, as well as with minimal working conditions: normal workweek, overtime, paid holidays, maternity leave and special leave. This is being done to lay a firm basis without which it would be illusory or even inadvisable to try to introduce reforms and improve the quality of working life.

In the medium term, the government believes that management and the unions should enter into negotiations respecting the quality of working life, division of labour, and worker participation in management. These will naturally be very delicate negotiations: starting with agreement on common objectives and interests, they presuppose a policy of co-operation rather than confrontation between employers and unions.

The government believes it will have a part to play at the beginning of the process, in identifying the needs, pointing out the advantages, and suggesting objectives, means, and stages in the introduction of labour reforms that will be compatible with maintaining industry's competitive position. But even when solutions have been found, evaluated, and verified, the success of any reform in the work environment will lie with the innovative capacity of the parties involved. In this respect, the government can suggest, encourage, and hope to convince labour and management to commit themselves resolutely to this path and enter into the necessary negotiations."

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EVOLVING ALTERNATIVE ORGANIZATIONAL DESIGNS: THEIR SOCIOTECHNICAL BASES

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INTRODUCTION

Formal organization design, or deliberate as opposed to informal or evolved organization design, is part of the evolution of both Western and Eastern civilizations. In Exodus, the Old Testament records the deliberate design to organize a mass who had lost their organizational forms during a long servitude as slaves. There are other reports in Western and Eastern history as well. Modern Western industrial organizations were first reported about 200 years ago and are intimately linked with the rise of capitalism and its dominant organizational triumph — the factory system. For these reports we are indebted to Adam Smith and Charles Babbage, who laid down the fundamentals of how people are to be used in structuring industrial work. Remarkably, their recommendations have gone largely unchallenged to this day and served as a basis for the development of the culture of Western industrial society. Only recently has the dominant structural form of modern organizations, that of scientific management-bureaucracy, been subject to critical examination leading to the evolution of alternative forms, to a deeper understanding of the assumptions and concepts underlying the classic forms, and to the evolution of new designs and theories. While raising important questions at all levels of organization, the major previous challenge, that of Karl Marx in the 1860s, has resulted largely in new forms of ownership. However, with the exception of Yugoslavia, the basic form of internal industrial organization is almost identical in communist, socialist, and capitalist countries. More organizational innovations, or development of alternative organization forms, are occurring in Western or capitalist countries than elsewhere today.

What are the bases of the organizational innovations or alternative organizations now being considered? To answer this question, we must go back to the implicit or unstated assumptions underlying

the dominant or classic organization designs, and must examine present demands and forces in society that are giving rise to alternative forms of organization as a response. The position taken here is that organizational forms both conform to the prevailing culture and influence further development of the culture. So, when new forms or alternative organizations evolve, they do so in response both to internal institutional needs and to changes in the environments of organizations.

In a recent paper, Herbst (1975) has provided a concise review of the underlying assumptions of the bureaucracy-scientific management models that are so dominant in organizational forms.

INTERNAL INSTITUTIONAL NEEDS

Internal institutional needs derive from the mismatch between implicit assumptions underlying classic organization forms and the changing reality surrounding both those who work in organizations and how the organization will accomplish those activities upon which its survival depends. Raised here are issues about power and governance, structure, man-machine relations, skills, roles, rewards, careers, management prerogatives, union rights, and other issues that now dominate management and industrial relations discussions.

A central implicit concept underlying classic organization has been that ownership carried with it absolute authority. The resulting authoritarian organizations embedded within democratic societies continue to be a growing source of difficulty between those members of an organization who represent the owners and the rest of the members. These difficulties stimulate growing concern with the purposes and social objectives of organizations. A few more assumptions are in need of emphasis. Others have been the object of discussion in countless books and articles in the last few years (Davis, Cherns, and Associates, 1975; Davis and Taylor, 1972). The implicit success strategy of classic organizations was based upon — and continues to require — men being or becoming cheap, unreliable, single-skilled, or single-purpose instruments, narrowly self-centered, and immediately responsive to simple rewards. The continued implementation of this strategy has served to develop apathy, hostility, fragmented tasks and services, and overblown bureaucratic superstructures.

Present assumptions concerning technology probably were realistic 200 years ago. Machines were then and still are dear and reliable; what needed to be done and how it was to be done were thought to be determined by logical and scientific means that were accepted as rational and applied in the work place. Revisionist or radical economists (Dickson, 1974) studying the history of the origin of the industrial revolution indicate that fractionated work was developed in the first factories, not so much to use the new machines, particularly the steam engine, but to stamp out craftsmanship as a way of working so that men could be fully controlled by owner-managers. Organizations operating under the

above assumption are so structured that men are the spare parts and staff specialists are the repository of learning from organizational experience, with a consequent loss of talent on the one hand, and a loss of organizational learning on the other. The fractionation of tasks required, and continues to require, an organizational superstructure of many layers to both cement together the disjointed pieces and deal with the internal and external disturbances that arise. The needs, abilities, aspirations, and ideals of society brought by individuals into the work place have served as a constant and growing source of difficulty, irritation, disaffection, and malfunction in classically structured organizations based on the bureaucratic-scientific management assumptions stated above.

EXTERNAL ORGANIZATIONAL ENVIRONMENTS

The single most descriptive term for organization environments is change. This characteristic in itself is the basis for innovation of alternative organizations, since the implicit assumption of classic organization was high stability or placidity of the environment. Organizations designed on the basis that changes will not be necessary find themselves developing new forms where response to continuous changes in the political, social, technological, and economic environments is the order of the day.

In the social environment perhaps the most significant change has been in educational levels; the average length of schooling for the entire work force will be 12 years by 1980. What is crucial here is not the specific skills that are acquired through an average of 12 years of schooling, but the socialization into expectations and rewards as well as ways of living and working in a school society. Most American organizations are based on concepts taken from scientific management, an organizational form 75 years old, proposed at a time when the average length of schooling of the work force was three years. Other changes in the social environment include the shift from privileges to entitlements, to rights, including the right to have meaningful careers, to control one's work life, etc. These are placing new pressures on relationships between workers and managers. On the whole, members of our society are prepared to give control of only a very small part of their life space to the organizations for which they work.

Related to changes in the social environment are changes in the political environment. These are placing on most organizations social responsibilities that were unheard of a few years ago, bringing into the purview of organizations a whole host of external factors that were thought to be safely ignored in the past. These extended responsibilities increase the turbulence of the environment of organizations and require them to be responsive to more and more changes if they are to survive.

Changes in the technological environments of organizations have represented both a continuation of the mechanization trend and a change in kind. The change in kind,

which until recently was misunderstood as the issue of automation, is now much better understood as continuous processing. The latter is now seen to require different organizational forms and roles. The impact of the changes in technology on organizations is bringing about an expansion of the field of organization study to encompass technology, which may explain the widespread interest in sociotechnical systems (Davis, 1971; Maitland, 1975).

Changes in product technology have brought in train changes in market requirements of the sort leading to greater market instability. This calls for more rapid response to the market on the part of the organization. Changes in process technology are of the sort that call for very large capital investments in plant and equipment, which require such a long payout period that presently designed organizations will have to be suitable to the needs of a period 10 years in the future. This is stimulating intensive organization design efforts in parallel with technology design.

In the face of these changes the responses of organizations are very mixed. A growing number are deliberately embarking upon the development of innovations in organization structure and in job structure in response to the needs and pressures of the situations in which they find themselves. The consequences of their attempts are alternative organizations different not only in specific particulars, but reflecting a systemic view of internal organizational life and relations with the external environment.

ATTRIBUTES OF ALTERNATIVE ORGANIZATION DESIGNS

Alternative organization designs cannot be discussed in specific, since each design represents the consequences of the choices made to achieve a fit with internal needs and external environments. However, if we look at the objectives that the alternative organization designs seek to satisfy, we began to get some insights into the differences from classic structures. An examination of alternative organization designs, particularly those based in socio-technical systems concepts, reveals attributes or characteristics commonly shared by most, if not all of them. A brief examination of these inferred attributes can provide insights as to the directions in which alternative organization designs are developing. What are referred to here as attributes do not always have physical manifestations; some are abstractions reflecting the structural and operational characteristics of the organization. Similarly, design processes that supported and reinforced the organizational attributes were followed by most of the alternative organizations. In addition, in such organizations one sees behaviors that derive from structure, and aspects of the local and national environments permeate the organization. With general regard for order of importance, the attributes of alternative organization designs are given below, each with a brief description.

1. Systemic. The structure of the organization and its roles reflect the recognition that all aspects of organizational functioning are inter-

related; the organization design process maintains the integrity of interrelated roles and structures.

2. Open System. Recognition of the need for continuous adaptation to requirements flowing from environments usually resulting in flexible structural features and to requirements for capturing and using organizational learning; the properties of the organization are reflective of the salient properties of its internal and external environments.

3. Joint Optimization. Recognition that in terms of meeting its output and service objectives, an organization is a sociotechnical system. As such, it is required to evaluate the impact of the technology design on the social system and of the requirements of the social system on the design and operation of the technical (work) system by jointly considering the best in either the technical or social system and its effect on having the best in the other.

4. Organizational Uniqueness. Structure of the organization or its components and its roles suit the specific individual organization's situation requiring individualized design based on general design principles (Cherns, 1976) in place of imported solutions.

5. Organizational Philosophy. The process of organizational design and the organization's structures and roles are congruent with agreed organizational values explicitly stated as an organizational philosophy.

6. Quality of Working Life. Explicit organizational values respecting the integrity, values, and needs of individual members are reflected in the roles, structure, operations, and rewards of the organization.

7. Comprehensive Roles of Individuals or Groups. Roles encompass tasks, activities, or functions required to accomplish objectives or meet goals; specific content of roles at any one time are determined by the individual or group in response to perceived needs.

8. Self-Maintaining Social Systems. Structure of organization, content and scope of roles, reward systems, design of technology, and functions of social systems are such that organizational units can carry on without external coercion; individuals or groups are provided the requisite response capabilities and authorities to regulate and control variances or disturbances without having to rely on external interference to achieve desired objectives, i.e., they are or can become self-regulating.

9. Flat Structure. Fewer organizational layers or levels.

10. Participation. Participation mechanisms and structures are extensive for problem solving, learning, and governance. Some refer to this and minimal status differentials as democratization of the work place.

11. Minimal Status Differentials. Artificial status differences are absent, i.e., there are minimal differences in privileges and status that are unrelated to role and organizational needs.

12. Make Large Small. Organizational and physical structures

provide both smaller, more intimate organizational boundaries and a feeling of smaller physical environment for individuals or groups.

13. Organizational Design Process. Technical, managerial, and personal components of the organization evolve in a participative, iterative manner, only partially determined by advance planning.

14. Minimal Critical Specification. A prominent principle of the organizational design process; designers specify (design or select) the crucial relationships, functions, and controls, leaving to role-holders the evolutionary development of the remainder.

15. Action Research (this is not an attribute, but refers to the principal source of organization data). Knowledge for organization design is based on organizational behavior data that are obtained from actual change instances in functioning organizations studied by means of action research approaches.

Growing numbers of managements, and occasionally but increasingly the unions as well, are prepared to risk the unknowns of alternative organizational forms and undertake the considerable changes in leadership and collaborative behaviors that are required. They have recognized that the dominant organizational forms are increasingly ill-suited to the perceived needs for institutional survival, economic survival, institutional effectiveness, and quality of working life.

INSTITUTIONAL SURVIVAL

A number of the attributes of alternative organizations are a response to the needs for institutional survival in a society where the confidence in individual leaders and private and public institutions is not very high. The designs are directed at providing congruence between evolving societal ideology and organization structure and behavior. Organization and job structures are directed at providing more participative, self-regulating, democratic roles and standards. Both operationally and structurally, differentials in status and privileges are minimized, and there is greater sharing of power and equalizing of influence. Many designs provide for participative systems of governance and social justice. Members of such organizations are found to be engaged in activities as a consequence of their competence rather than membership in a managerial class or a worker class. Of course, there are snags and hangups.

Participative systems (Pateman, 1970) call for new understandings and relationships between managements and unions. Few such have developed so far and there is a distinct possibility that direct participation on the part of employees, which is a growing demand, may become an area of conflict between unions and managements. Direct participation competes with representative participation — the basis of the union's role in relation to management. Both are needed and if the former is used or seen to be used to drive out the latter, action to protect the union's hard-won role may be expected to ensue. The working

through of changed roles for each of the parties and the building of appropriate trust is one of the major developments needed in the present era.

Where survival is related to the regulation and control of pollution, for example, control is found to be in the hands of those who either can contribute to or avoid pollution. Alternative organizations have avoided falling into the conventional organization trap of creating a special function, i.e., pollution controller or pollution inspector, to handle a crucial need. Theoretically, what we see here is a reduction in the traditional management role of filtering and insulating members of the organization from needs or requirements coming from the external environment.

ECONOMIC SURVIVAL

Long-term economic survival is a requirement in cases of intensive capital investment in plant and facilities. This may be an underlying reason helping to explain why so many new alternative organization designs are for continuous process industries. As one board chairman indicated, "We can only afford to build new plants with very costly new technologies based on the economic justification that they will maintain effective performance over a very long time period. Therefore, we cannot risk designing 'old organization structures,' whose defects we know, in conjunction with new technologies."

A principal organizational objective sought in these instances is that of adaptability, and design of organization structure is seen as the means by which it is to be attained. By providing structure, adaptive behaviors can develop not dependent upon chance or goodwill. In such organizations, the principle of redundant skills or wide training is the practice. Organizational units are so structured that, as appropriate, they are on the boundary of the organization and as such, deal with internal and external problems, carrying on their work as directly affected by environmental forces. Again, we see that management does not (and perhaps cannot) insulate and filter environmental pressures. What we have here, from the point of view of organizational analysis and design, is an interesting set of issues concerned with boundary location. Further, in such organizations all jobs from top to bottom of the organization are multiskilled jobs. Structures exist for capturing organizational learning whether through immediate feedback, the control of data at the lowest point in the organization at which the data are generated, the development of deliberate learning experiences around the performance of various activities, or through widely shared data from top to bottom without restriction as to status or class of the data receiver. In sum, workers know a great deal more about the functioning of the organization, about what is happening to it in terms of its environments, and as multiskilled members of organizational units, they develop the understandings of the exigencies at levels usually seen to exist only among managers.

The structure of such organizations is usually characterized by the requirements to control and

regulate the critical variances or disturbances affecting performance. In response, whether within teams or groups, or within individual jobs, one sees joint maintenance and operations, joint quality control or inspection and operations, and frequently a matrix structure to deal wtih emergencies or major disturbances. In support of such structural arrangements is the delegation of the necessary authority to act — what may be called widely dispersed work authority. Additionally, one finds in such settings decentralized laboratories for inspection or control, decentralized maintenance workshops, etc. In capital-intensive settings, particularly in process industries, the organizational characteristics reviewed above are seen to be linked to economic survival. Even in matters of operational effectiveness, economic survival is seen to be much more dependent on minimizing and avoiding down time than on increasing the speed of operations.

INSTITUTIONAL EFFECTIVENESS

Some innovations are directed at enhancing institutional effectiveness. In alternative organizations one sees team ownership of work process, by which is meant an identifiable part of the process is assigned to a group or team of people who are responsible for achieving the outcomes desired, regulating the disturbances, etc. The design of the structure of the team, its jobs, duties, etc., is generally based on the notion of minimal critical specifications, permitting evolutionary self-development to take place in support of autonomy or self-regulation. Usually within a team or group there are ill-defined boundaries between the jobs or, more precisely, roles of team members. What members do is subject to self-generated change from time to time to suit the demands that arise. Additionally, one finds that an essential part of the role of the members of such team is the maintenance of the team's social system, so that both the team or group and its members have duties to perform and functions to carry out, related to maintaining the social system and to the work it does. This is of course very much the attribute of self-regulating, semiautonomous, or autonomous work groups. Additionally, one sees vastly expanded roles for members, including not only work activities, but teaching activities and others as well. In addition, members may and do frequently serve on ad hoc problem-solving groups created to deal with production, performance, and other difficulties.

Another characteristic of alternative organizations is that individuals progress through the organization largely on the basis of the acquisition of skills, knowledge, and competence rather than by being advanced to or appointed to the specific jobs, usually on the occasion of the release of the job by its incumbent. To support a system of progression, such organizations have deliberate and specific means of providing learning and involving others in the teaching of colleagues, so that they can progress. Of course, such organizations have reward systems that support and reinforce such progression; namely, people are rewarded for the knowledge and the competence they have rather than for the job title they may

possess or the specific tasks that they are assigned to carry out.

QUALITY OF WORKING LIFE

Alternative organizations reflect the position that enhancing the quality of working life of their members is an essential objective. This is seen as responding to changes in the external social environments of organizations by their members. Rising expectations in our society, and expectations and experiences flowing from long years of schooling, to name a few, are making themselves felt in the work place in demands for individuality, autonomy, shared power, careers, meaningfulness, appropriate rewards, and recognition as well as equitable rewards, etc. Many of the attributes of alternative organization designs previously reviewed work to provide for such needs, which are receiving growing emphasis, particularly by younger members of organizations.

The emphasis on individuality has led a number of organizations to make provision for individual differences, one of the objectives in enhancing the quality of working life. When provision of options for satisfying individual differences is taken as a design requirement, alternative organization designs are in complete antithesis to both bureaucratic practice and ethos and to the organizational and job standardization central to F.W. Taylor's scientific management. Such organization and job designs are characterized by many career paths, localized structuring of work, different organization structures among work groups, departments, and so on, options for progressing at different rates, etc. Organization design to support individual differences is an area in great need of research and development.

Many designs of alternative organizations, particularly at the level of jobs, incorporate various attempts to provide better security, equity, and rewards, and to satisfy the growingly articulated psychological needs of all who work. These needs have been stated before (Davis, 1975; Englestad, 1972) and the list given below is enlarged to include individual differences.

1. The need for the content of the work to be reasonably demanding in terms other than sheer endurance, yet provide a minimum of variety (not merely novelty).

2. The need to be able to learn on the job and go on learning, which requires standards and knowledge of results.

3. The need for some area of decision making that an individual can call one's own in which one can exercise one's own discretion.

4. The need for social support in the work place, i.e., the need for an individual to know that one can rely on others for help needed in performing the job as well as for sympathy and understanding.

5. The need for an individual to have recognition within the organization for one's performance and contributions.

6. The need for an individual to be able to relate what one does and what one produces to one's social life.

7. The need to feel that the job leads to some sort of desirable future.

8. The need for an individual to know that choices are available in the organization by which one can satisfy one's needs and achieve one's objectives.

Designing jobs in support of satisfying these needs is seen in the effect it has on design or choice of machines, layout, work systems, training, rewards, careers, and other aspects of life in the work place.

SUMMARY

This review of alternative organizations began by indicating that new organizations are evolving that are systemic. An examination of all the attributes and characteristics described reveals that they are interrelated, one supporting another. Rewarding individuals for knowledge and competence has a bearing on adaptability. Team ownership of work process has a bearing on control of critical variances, etc.

The effectiveness of such organizations and the support that they are receiving from their members raises the question as to their general applicability to other situations not characterized by the deliberate and specific pressures coming from the various external environments. It is our view that there is widespread applicability for these alternative organizations. They not only are proving themselves to be suitable to new demands and conditions, but they provide the beginnings for examining long-standing issues regarding industrial and business organizations in democratic societies.

Some time ago Davis (1971) indicated that "the social and the technological forces that can be seen working toward the same end, for 'job characteristics that develop commitment' and thus promote the economic goals of the highly automated enterprise are exactly those that are beginning to emerge as demands for meaningfulness from the social environment — participation and control, personal freedom and initiative." What was becoming visible in 1970 is a well-established trend in 1976.

POSTSCRIPT

From a societal standpoint, it may be instructive to turn to another literature, one that openly challenges the ethos and underlying assumptions of industrial society as now developed. In this book *Small Is Beautiful: Economics As If People Mattered,* Schumacher (1975) takes up the issue of large-scale organization design. To stem the evergrowing Parkinsonian bureaucracies, he indicates that "the fundamental task is to achieve smallness within large organizations." Every "organization has to strive continuously for the orderliness of 'order' and the disorderliness of creative 'freedom.' The specific danger inherent in large-scale organization is that its natural bias and tendency favor order, at the expense of creative freedom." Schumacher lays down five "principles" for design of large-scale organizations:

1. The Principle of Subsidiary or of Subsidiary Function: "The higher

level must not absorb the functions of the lower one, on the assumption that, being higher, it will automatically be wiser and fulfill them more efficiently."

"Loyalty can grow only from the smaller or lower levels to the larger or higher ones, not the other way round." "The burden of proof lies always on those who want to deprive a lower level of its function, and thereby of its freedom and responsibility in that respect." "The higher level will gain in authority and effectiveness if the freedom and responsibility of the lower levels are carefully preserved."

2. The Principle of Vindication: With carefully defined exceptions "the subsidiary unit must be defended against reproach and upheld by central authority." "Good government is always government by exception." Application of the principle requires very few criteria for accountability; otherwise, creativity and entrepreneurship cannot flourish in the smaller lower units.

3. The Principle of Identification: "Each subsidiary unit must have both a profit and loss account and a balance sheet." "It is not sufficient to have one balance sheet for the organization as a whole." "A unit's success should lead to greater freedom and financial scope for the unit and failure should lead to restriction and disability."

4. The Principle of Motivation: "Although it is a trite and obvious truism that people act in accordance with their motives, motivation is the central problem of large organizations given the incomprehensibility that stems from large size and its bureaucratic structure, remote and impersonal controls and abstract rules and regulations." Particularly at lower levels "many have no desire to be in the work stream because their work does not interest them, providing them with neither challenge nor satisfaction, and has no other merit in their eyes than that it leads to a paycheck at the end of the week."

5. The Principle of the Middle Axiom: "Neither the soft method of government by exhortation nor the tough method of government by issuing specific instructions is adequate." "Required is something in between, a middle axiom, an order from above that leaves freedom of choice to those doing the job."

Not surprisingly these "principles" are not so strange when examined in the light of the evolving structures of alternative organizations.

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THE QUALITY OF WORKING LIFE AND ORGANIZATIONAL IMPROVEMENT

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INTRODUCTION

This paper will describe, in the briefest possible compass, what is meant by "Quality of Working Life", a relatively new approach to work and organizational improvement. The term itself, "QWL", as it has become called for short, was coined at a small international conference held at Columbia University's conference centre (Arden House) in September 1972.

Available terms such as "industrial democracy" with its European connotation did not suit North American conditions, while "job enrichment" or "job design" were too narrow. A new general term, politically neutral but indicating the direction that future development would likely take, seemed to be required. QWL proved the most acceptable among the suggestions made.

The purpose of the Arden House meeting was to obtain a better understanding of the frustrations and maladies of the work place which were occasioning poor morale and poor performance and to identify approaches which would lead to positive outcomes. The most promising way forward seemed to lie in an increasing number of innovative work improvement projects undertaken in organizations of widely different kinds in most Western countries. A few pioneer studies in the 50's had led to some quite large scale, well sustained endeavours during the 60's. These in turn had stimulated a much wider field of activities as the decade of the 70's opened up. These projects have been based on participative decision-making and work restructuring. Most of them have been able, simultaneously, to increase both job satisfaction and organizational performance, even though quite a number of them petered out, either through mistakes made by those immediately concerned, or more often through lack of support in the wider organization where most people did not understand what was being attempted and where many felt threatened by it. What the new designs did accomplish was to improve the quality of work experience of those directly involved and show that this could pay off.

Though these projects began in manufacturing industry, they have since been carried out in service industries, in the public as well as the private sector, and in hospitals and educational establishments. The principles have been discovered to be quite general. They apply moreover to all levels and functions. Nevertheless, special attention has been paid to the lower levels which had been neglected in earlier approaches to organizational development. These had focussed on management.

THE BASIC CONCEPT

Concern with improving the quality of life is increasing in all Western countries. To improve the quality of life in the work place, where we spend half of our waking time, is a central part of this concern which represents an emergent value as Western societies pass from the industrial to the post-industrial era. This latter is usually defined as a state reached when manufacturing industry because of its capital intensive and advanced technical condition employs less than a half, perhaps no more than a third or quarter of the working population.

Though the problem of a new form of scarcity regarding the depletion of non-renewable physical resources has now appeared, this does not mean that the old form of economic scarcity need return. Technology has developed to a point where enough can be produced to provide for the basic needs of all at a level considerably above that of mere subsistence. (At least this is so in the advanced countries, and this paper is concerned with Canada as an advanced country).

The post-scarcity situation is changing the underlying attitude of people to work. A survey carried out in 1974 for the Federal Government of Canada showed that while 97% of Canadians preferred being employed to being unemployed, only 67% were willing to take the meanest and dullest type of job at the minimum wage; 33% said they would sooner be on welfare. Though commitment to work is still central to people's lives, this commitment is becoming conditional on the quality of the work experience rather than remaining a compulsion of dire necessity. While 85% of respondents felt "satisfied" with their jobs in a vague and general way, only 50% would take the same job again and only 30% felt seriously committed and involved in what they were doing (Table 1).

Canadians (in the same survey) put the following features at the top of a long list of desirable job requirements: interesting work; the means to do it; a piece of the action; dignity. Only then came good pay and job security. Though these two economic factors were placed first by the unskilled group, this group also included the four non-economic factors in their top six (Table 2). Similar results have been obtained in a number of Western countries. In the post-scarcity situation an increasing number of people (though not of course everyone) is seeking, over and above a reasonable and reasonably secure standard of living, an opportunity both to develop themselves and to contribute to society. One would expect to find a higher proportion of such people in technologically advanced than in less advanced industries because of the sophisti-

TABLE 1

JOB SATISFACTION

	Per Cent
My Job is O.K.	85
Take Same Job Again	50
Involved and Committed	30
Rather be Employed	97
Rather be Unemployed	3
Take Dull Job at Minimum Wage	67
Sooner be on Welfare	33

TABLE 2

MOST DESIRABLE FEATURES OF JOBS

Interesting Work

Means to do it

Piece of the Action

Dignity

Good Pay

Job Security

More Skilled Emphasize Human Factors

Less Skilled Emphasize Economic Factors

Both Include All Six Among Most Desirable Factors

cation and challenging character of many of the core jobs. To enhance the opportunities presented and the wish to respond to them is what is meant by improving the quality of life in the work place.

The majority of jobs, however, in most manufacturing and service industries have been designed in a narrow and circumscribed fashion which yields a low quality of working life for the many as distinct from the privileged few. These jobs are monotonous and uninteresting for large numbers of white-collar as well as blue-collar workers. They give little scope for personal fulfillment or accomplishment. They are associated with high turnover and absenteeism; with grievances and labour disputes; with unnecessary down time; with bad work leading to costly rework; with increased alcoholism, drug abuse and psychological stress. All these are symptoms of what is often referred to as alienation. Directly and

indirectly, they all tend to increase production costs.

Yet it is not necessary for most ordinary jobs to be designed in this way. Experience is now available from projects undertaken in most Western countries to show that many such jobs can be designed or redesigned so that they do give rise to interesting work; do afford means over which people can exercise considerable control; do give them more of the action; do enable them to recover a sense of human dignity. When work is restructured along these lines, two results usually follow: higher job satisfaction is experienced and a higher level of performance is achieved. QWL and productivity are positively associated.

When they are not, enough experience is now on hand to enable us to point to the reasons. Most commonly the dissociation arises because the deeper value and wider organizational issues involved are not understood by those concerned. The re-structuring of work in what may be called the new design idiom cannot for long yield positive results if it is confined merely to one or two small areas of an organization. Under these conditions innovative projects tend to fade out. Disappointment ensues; one is worse off than before. To obtain lasting benefits, the new idiom has to be diffused through an entire work establishment, such as an operating plant, and supported by management above this level.

THE UNDERLYING PHILOSOPHY

The transformation involved requires a new philosophy which regards work as a factor fundamental to human development rather than simply as a means of earning a living. Such a philosophy entails designing work organizations to this end. The new design idiom depends on the primacy of collaboration over competition inside the organization — so that it may become more competitive outside in the market place, hence survive and hence increase job security. This requires a participant management style; non-bureaucratic organizational forms, and new principles of work structuring. Together these can create jobs worth doing for their own sake for everyone in the organization. They permit a new work ethic to develop which recognizes the importance of the quality of working life as a way to personal growth and as a central part of the quality of life as a whole.

As much as goods and services, the product of work is people. There is growing evidence that those with a higher QWL have more to offer at home and become more active in the community. A society can be no better than the quality of its people. This depends to an important extent on how far work experience over the years fosters or prevents personal development.

Advanced industrial societies have reached a critical point regarding the choices that must be made on this issue. Economic growth has slowed down. Inflation has become persistent. The rising standard of living experienced since World War II has depended on the continuance of high economic growth and the containment of inflation. With slower economic growth and uncontained inflation, the prevention of

TABLE 3

NEW ECONOMIC SITUATION

Slower Growth

Inflation

Lower Profit Levels

Wage Increases More Difficult

Needed: Higher Level of Organization Performance

Depending On: Higher Job Satisfaction

More Collaboration

Doing More With Less

TABLE 4

WORLD ENVIRONMENT

Change Rate

- Interdependence
- Complexity
- Uncertainty

Loss of Stable State

Turbulence

- Conventional Organizations Not Coping as Well
- Innovative Organizations Doing Better

income erosion, not to speak of the achievement of income gain, depends more than ever on increasing productivity. (Table 3). But nowhere is productivity increasing sufficiently for this purpose. Too often it is stationary and there are many instances of decline.

With the passing of the age of scarcity (that is, the old scarcity) the carrot and stick have lost their former powers of persuasion. Paradoxically, the maintenance of our material well-being now depends on our making advances on the non-material plane. Whether the level of technology is high or low, simple or complex, actual as compared with possible performance is a function of the involvement in and commitment to what they are doing by those directly concerned. Involvement and commitment cannot be imposed. They can only be given, and are given only when they arise naturally from the intrinsic value of job experience. To improve the quality of working life for its own sake has paradoxically become the main way now available to get the best out of increasingly sophisticated technology and to improve the bottom line.

Industrial advance has produced a world in which the levels of interdependence and complexity — and hence of uncertainty — have become higher than any previously

experienced. The environment has become "turbulent". Change has become continuous. We have "lost the stable state". Under these conditions, conventional bureaucratic and technocratic organizations are too inflexible and non-innovatiave to retain competitive advantage. Organizations moving into the new idiom have the resourcefulness to develop in alternative directions. Their members, at all levels, are more willing to take risks. They are future-oriented, a quality that has become mandatory (for survival) in a rapidly changing environment in which competition is world-wide (Table 4).

Industry in the advanced countries is becoming information-dependent. The complex information-handling which characterizes the core jobs both in the office and on the shop floor in such industries requires the sophisticated interpretation of data and the anticipation and prevention of error. The worker has become the manager of a job system. To a large extent he supervises himself. Correction that mainly depends on external supervision is too frequently too late. The science-based industries particularly cannot, without self-damage, produce jobs which are the extreme as regards narrowness and repetitiousness. But traditional approaches to job design are resulting in just such jobs at a time when the micro-electronics revolution is getting underway. This has particular serious implications for continuous process industries and those concerned with computer-aided assembly and fabrication.

All in all, concern with QWL is to be seen as an emergent value arising in advanced industrial societies as they pass into the post-industrial era. With the old scarcity dynamic no longer operative, the attitudes especially among younger (and more educated) workers have changed. A job which allows personal fulfillment rather than one which simply enables a living to be earned is increasingly expected — except among those who seem irreversibly alienated and parasitical. The design of jobs in the new idiom has become the best way to secure higher productivity, more than ever necessary in face of slower economic growth and persistent inflation. Such job designs form the basis of a process of organizational transformation — from bureaucratic and technocratic forms which are rigid and non-innovative to more flexible innovative forms founded on participation rather than authoritarianism. These emerging forms are more able to maintain competitive advantage in fast changing environments. They give scope for a higher quality of working life for the many rather than for merely the privileged few. In so doing they contribute to human betterment and reduce the divisions and tensions in the wider society.

PRINCIPLES

We must now ask how the basic concept and underlying philosophy can be translated into practice. For this purpose a set of principles and strategies has gradually evolved from the experience of the large number of QWL projects which have now been undertaken. They are however, no more than guidelines. Every project must be custom-built by those directly concerned who must themselves discover what is best for them through their own

learning. Each QWL project is a unique process. Nevertheless, it must embody certain fundamentals, else it will no longer be QWL. These fundamentals are described in what follows.

The new idiom of job design entails abandoning what has become known as the technological imperative (that the requirements of the technology must be met whatever the people cost). To be abandoned also is the notion that improving "human relations" will, by itself, compensate for modes of job structuring which unduly limit the scope of the human individual through the extreme application of the principles of a "scientific management". Machines and people are different. Work systems need to be designed so that the best match is obtained between the two, which are complementary. This principle has become known as the "joint optimization" of the social and technical systems. A work organization is a "socio-technical" system (Table 5).

Jobs have two sets or properties: extrinsic and intrinsic (Table 6). The extrinsic are familiar: adequate and fair pay; job security; benefits such as holidays and pensions; safe and healthy conditions in the work environment; due process regarding grievance, dismissal, etc. The intrinsic constitute a newly recognized dimension: tasks which offer variety and challenge (elbow room); opportunities to go on learning on the job; to make some decisions oneself, to have some autonomy, some piece of the action which is one's own; to experience group belongingness with recognition and support from superiors, colleagues and subordinates; to feel that what one does is making an identifiable and meaningful contribution to the overall outcome and gives one an acceptable occupational identity; to believe one's work life contains some promise of a desirable future (not necessarily promotion but additional experience, for example, further training, redeployment, wider responsibility, etc.).

In the new design idiom the preferred way to redesign jobs is to involve the people who actually do them, and who have the most intimate knowledge of them, in the redesign process. They can begin by rating their present jobs on the criteria on Table 6. They then learn to analyze their work systematically and to identify what needs changing. Then one or two operators (office personnel if the unit is administrative or sales clerks if it is retail), along with a supervisor and staff specialist, can make change proposals and test out their acceptability to the work group and to management. This is known as Participant Design. Beginning in limited areas with trial projects, participant design gradually extends to the whole organization. Some of the best successes have been obtained in designing new establishments in this way — involving both past employees with relevant experience and the first groups of employees who will actually work in these establishments. A principle of "minimum critical specification" is followed, which means that much is left open to be decided as operating experience is gained. Any unions concerned are involved from the beginning. If the organization is non-union, other ways have to be found through which employees can

TABLE 5

JOINT OPTIMIZATION OF TECHNICAL AND HUMAN RESOURCES

- Industrial Engineering, Operations Research and Management Science Approaches
- Human Relations Approaches
- The Systemic, Sociotechnical Approach

TABLE 6

PROPERTIES OF JOBS

Extrinsic	Intrinsic
Fair and Adequate Pay	Variety and Challenge
Job Security	Continuous Learning
Benefits	Discretion, Autonomy
Safety	Recognition and Support
Health	Meaningful Social Contribution
Due Process	Desirable Future
Conditions of Employment	The Job Itself
Socio-economic	Psycho-social

express their views about concerns them as a group.

Participation is the basis of the new idiom. One must distinguish, however, between direct or work-linked participation in decision-making at one's own level and representative participation through having workers on Boards or Works Councils. Only the first can directly improve the quality of work experience. The second is concerned with problems of governance: who is to have a voice in deciding the nature of the businesses engaged in; the broad strategies followed; the distribution of profits, etc. In some countries the two go together; in others, one is preferred, the other avoided. Either or both may be deemed incompatible with free collective bargaining as they may compromise union independence (Table 7). Some unions, however, see advantages in participating in both, as in Scandinavia; or more particularly in the representative form, as in West Germany. In North America, most unions have held themselves aloof from participating in either, though recently one or two leading unions in both the U.S. and Canada have begun to engage in the work-linked form. In Table 8, the situation as regards the strength of collective bargaining, representative and work-linked democracy is summarized using a five point scale (0-4). In several countries the situation is in transition.

TABLE 7

FORMS OF INDUSTRIAL DEMOCRACY

Representative	Workers on Boards Works Councils
Work-Linked	Participant Design of the Workplace
Interest Group	Collective Bargaining Binding Contracts

TABLE 8

LEVELS OF INDUSTRIAL DEMOCRACY IN SELECTED WESTERN COUNTRIES

Country	CB	R	WL
Norway	4	3-4	2-3
Sweden	4	3-4	2-3
Holland	3	2	1-2
Germany	2	4	0-1
France	2	1	0-1
U.K.	4	0-?	0-1
U.S.	2-3	0	0-1
Canada	2-3	0	0-1
Australia	2-3	0-1	1-2
Yugoslavia	0	4	0-?

CB - Collective Bargaining
R - Representative Democracy
WL - Work-Linked Democracy

The range of QWL activities is very broad. Joint labour-management steering committees may be formed to decide on and monitor acceptable projects and action groups to carry them out. The projects themselves may involve the introduction of flexi-time, gain sharing plans such as Scanlon, or payment for what one knows rather than for what one does; work restructuring; involving workers in process or product improvement or in redesigning layouts; in evolving schemes of job progression so that skills are widened; and in taking more responsibility in self-managing semi-autonomous work groups which

absorb some maintenance, quality control and planning tasks (Table 9).

QWL activities usually lead to a number of concrete results. The literature is agreed that an improvement in product quality is almost always achieved. Usually, there is a reduction in costs through such factors as less down time. Often, too, the level of labour turnover, absenteeism and sickness become markedly less. There are fewer grievances and labour disputes (Table 10). Attainment of these results, however, depends on QWL endeavours being supported by all levels of management and, in unionized plants, on the cooperation of the union being secured.

Activities of the above kind cannot be successfully undertaken unless the role of the supervisor is changed from that of an old style boss to that of a facilitator. He will now need interpersonal and group skills, training ability, capacity for forward planning on a longer time horizon and to negotiate priorities on behalf of this group with other departments. This requires a considerable training investment. The work force also requires training in additional skills and wider responsibilities.

These activities will sooner or later entail a change in the character of the organization. This transformation involves a shift from one basic pattern to another. A basic pattern

TABLE 9

QWL ACTIVITIES

- Redesign of Jobs
- Layout Redesign
- Product Improvements
- Process Improvements
- Changes in Information Flows
- Changes in Support Services
- More Work Group Autonomy
- Wider Organizational Changes
- New Roles for Supervisors
- Problem Solving Training
- Interpersonal, Group Skills Training
- Management Development

TABLE 10
QWL RESULTS
Improvement in Quality
Reduction in Costs
Increase in Output
Reduced Turnover
Less Absenteeism
Less Sickness
Fewer Grievances
Fewer Strikes

of this kind which contains many components all consistent with each other is often referred to as a "paradigm". The old organizational paradigm constitutes a rigid technocratic bureaucracy. The new constitutes a much more flexible and adaptive modality based on participation and joint optimization (Table 11).

The old paradigm is based on the technological imperative; people are viewed simply as extensions of the machine, as expendable spare parts; work is simplified on the one man-one job principle; controls are externalized in supervision, functional staff and precise work rules and administrative procedures; management is authoritarian; the pyramid is tall; the climate is one of internal competition and gamesmanship; risks are avoided; innovation is low.

The new paradigm is based on joint optimization; people are viewed as complementary to the machine and are to be developed for their own sake and as key organizational assets; jobs are grouped into operational sub-systems with skills being broadened and controls internalized as far as possible in the primary work group; management style is participative; the pyramid becomes flatter; the climate is one of openness and cooperation; risk-taking is encouraged; and the level of innovation goes up.

In the old paradigm, the organization pursues only its own interests. In the new paradigm, externally, the organization recognizes its interdependence with the wider environment both social and physical, so that some of the externalities begin to be internalized. Within itself, it recognizes the need continuously to improve the QWL of its members — to produce high quality people as well as goods or services of high quality. On both counts, the organization accepts "social responsibility" as a condition of continuing its market thrust.

Organizations belonging to the new paradigm are not feather bedded. They are much "leaner" than those belonging to the old. Manning levels in both the blue- and white-collar work force are lower, often a third lower. There are fewer supervisors and junior staffs. Not as many specialist departments are required so that there are also fewer middle managers. There are far fewer work interruptions. Absenteeism, turn-

TABLE 11	
OLD PARADIGM	**NEW PARADIGM**
The Technological Imperative	Joint Optimization
Man as an Extension of the Machine	Man as Complementary to the Machine
An Expendable Spare Part	A Resource to be Developed
Maximum Task Breakdown Single, Narrow Skills	Optimum Task Grouping, Multiple, Broad Skills
External Controls (Supervisors, Specialist Staffs, Procedures)	Internal Controls (Self Regulating Subsystems)
Tall Organization Chart, Autocratic Style	Flat Organization Chart, Participative Style
Competition, Gamesmanship	Collaboration, Collegiality
Organization's Purposes Only	Members' and Society's Purposes also
Alienation	Commitment
Low Risk Taking	Innovation

over and grievances are lower. Any of the new plants or administrative establishments designed on the new principles will demonstrate these features. In established organizations, great consideration and care need to be given to all those, at whatever level, who are likely, or believe they are likely to be adversely affected by the very substantial changes involved in making the transition. Particularly important is the involvement in the preparatory as well as the later stages of middle management and supervision and the hourly employees (the union if there is one). Any attempts for the sake of short run economic gains to make changes in ways which contravene the basic commitment to participation and the determination to secure win-win outcomes for all (whatever compromises have to be made) will create distrust and discredit QWL as a philosophy of work.

STRATEGIES

Four main options are available at the overall corporate level as regards QWL change strategies

(Table 12). The first is to reject QWL, at least for the foreseeable future. To wait until many more organizations have gone this route and to reconsider when the new paradigm has become a generally accepted mode and when the main "do's and don'ts" have become well established. The next is to adopt a laissez-faire posture. If one or two managers here and there want to try something, let them. If they fall on their face, too bad; if they succeed, the brownie points are theirs. But there is no support from the wider organizational system. Projects undertaken in these circumstances tend to fade out when the initiators are transferred, promoted or leave. The negative aftermath militates against further developments.

The third option may be called selective development. (Table 13). Top management is not prepared to make an unqualified commitment to the new idiom and to make public a statement of management philosophy which fully embraces QWL in its widest implications. It is, however, willing to give corporate support to QWL projects in carefully selected establishments where local management and workers are interested, the local union is supportive and where there is a reasonable chance not only of initial gains but of self-sustaining success.

Finally, in some corporations or indeed public agencies top management may judge that enough experience has been gained and benefits

TABLE 12

FOUR OPTIONS

- Rejection
- Laissez-faire
- Selective Development
- Corporate-wide Commitment

proven that an overall public commitment can be made and continuous efforts undertaken in all parts of the organization. A few organizations (in several countries) have made such commitments and are following them through in practice. Nothing, however, is more likely to turn the clock back than a declaration which turns out to be largely rhetorical. In any case it could be premature with regard to the current beliefs and attitudes in most sections and levels of the organization, or unwise because it would conflict with immediate priorities so that the necessary attention could not be given.

TABLE 13
SELECTIVE DEVELOPMENT
• Benefits of Selective Development • Risks and Costs of Selective Development • Risks and Costs of Not Pursuing Selective Development

Selective development seems to be the course increasingly favoured by organizations embarking on long range QWL programmes, especially when they are large and diversified. This entails being clear about the nature of the likely benefits, taking into account the interests of all parties involved, given the rapidly changing environment and the changing character of the work force. The risks and costs of not embarking on long range QWL programmes need to be weighed *no less* carefully than the risks and costs of going forward. In the longer term, the penalties of inaction can be very great, but too much in the way of immediate disturbance can be self-defeating.

CONCLUSION

In conclusion, QWL opens up a set of very basic issues. Deep questions of value are involved, of organizational purpose and of the type of society one regards as constituting a desirable future. If one wants a more human and a more democratic, rather than a more inhuman and more totalitarian world, one is likely to conclude that QWL will contribute to realizing it. One may, in addition, believe that advanced industrial societies cannot persist unmodified too many decades longer in their prevailing mode without producing severe dysfunction and unacceptable suffering, and that what the private sector chooses to do in initiating change will be critical in avoiding negative outcomes. In this case one is still more likely to conclude that to improve the quality of life in the work place, as part of increasing the quality of life as a whole, has become one of the central issues of our times. The scale of effort required, the determination necessary to sustain programmes in the face of resistance and setbacks will then — but only then — seem worthwhile.

The benefits of QWL are essentially long term. They have implications for the wider society and for the development of the individual as well as for the organization itself. They provide one of the critical ways of reducing social conflict in the decades immediately ahead.

In organizational life, we are entering an era in which QWL is to be regarded as a main means of maintaining and very often increasing the level of performance in face of rapid change and unforseeable events.

QUALITY OF WORKING LIFE: A BLUEPRINT FOR CHANGE?

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Since the Industrial Revolution, the Western world has believed that economic growth and material progress would never end. Although we accepted the occasional setback, we argued that it was but a temporary state, and life would be easier in the future. We accepted that we had jobs whose function it was to "produce" and these jobs in turn allowed us to participate, more or less, in the consumer society. The evolution of our culture contributed to feed this belief.

Societies evolved, slowly at first, from times when work was life, when searching for food was the central preoccupation of men, women and children, to organized hunting where there was some division of labour, to the planting of crops. With the advent of farming and the capacity to store surplus food, division of labour increased further; some farmed, others became craftsmen.

The steam engine introduced another phase in the development of our culture. It was the age of technology, of machines, of mass production leading to mass consumerism. The evolutionary processes that brought us the age of plenty paradoxically account for much of the inequality, poverty and alienation present in today's society. The millions who would be free, have delivered themselves into new forms of bondage.

Since the Industrial Revolution, societies have become more similar to each other, as if industrialization had an inner logic all of its own, cutting across traditional, national and cultural boundaries.

> "There seems to be an intelligible process that governs the maintenance of common cultural forms, initiates changes, and determines their transformation along parallel paths. Cultures have on the whole evolved along similar and convergent paths which are highly predictable, from the knowledge of the processes of production, intensification and, depletion,"

writes Marvin Harris in his book *The Origins of Cultures.*

Industry has become the dominant institution of a modern society. Its impact on the entire culture is extremely difficult to assess accurately. Certainly it has been a major influence in shaping the values of the millions of workers.

Perhaps as a result, an industrial society tended towards developing a consensus of ideas, beliefs and values. Since the Second World War, ideological conflicts are replaced by realistic pragmatic consensus. "Industrial Man" is no longer faced with real ideological alternatives within society. The state is seen as a coordinating agency, managing conflict between interest groups, establishing and interpreting the rules of the game. The economic and political bureaucracy attends to the perceived needs of the masses, thus bringing our Western industrial societies closer to a condition where the state attends to the every need of the people, by controlling, producing, and distributing all resources.

It is difficult to test the validity of this industrial evolutionary theory, but it serves more as a statement about the development of industrial societies, based on a view of society which sees technology as both inevitable and an end in itself, leading to a "just" society. In this "Technological Utopia" individual action is discounted as being of little consequence, because the desired end is collective satisfaction.

The late Dr. Margaret Mead in 1942, wrote: "By working towards defined ends, we commit ourselves to the manipulation of persons, and therefore to the negation of democracy. Only by working in terms of values, is it possible for us to use scientific methods and technology to implement plans for altering our present culture, without the negation of the moral autonomy of the human spirit."

Industrial societies share a core set of structures, i.e., the factory system of production and market system, extensive commercialization of goods and services, and division of labour which allocate individuals into an occupational and stratification system. The following seem to be some of the unavoidable consequences:

- diminishing cultural variety in society;
- increasing role for governments in regulating problems and needs created by advanced technology;
- division of labour, organized hierarchically;
- compensation related to position;
- need for social and geographical mobility;
- metropolitan areas forming the basis of industrial life;
- educational systems designed to supply skills determined by technology.

EVOLUTION OF THE ORGANIZATION OF WORK

A key element contributing to the increased alienation of workers was the evolution of our industrial society and more particularly, the way in which we have viewed the relationship between man and his work.

What might have been the way that the pre-industrial society felt towards work? Let me quote from Joseph Conrad's *Heart of Darkness:*

"I don't like work, no man does, but I like what is in the work. The chance to find yourself, your own reality, for yourself, not for others."

The Industrial Revolution destroyed what men felt was unique in each job, in each skill. It destroyed the control that men had over their work. It sought to establish a new ethic centred on the factory. It evangelized that hard work was the only acceptable means of fitting into society and the only way of getting into heaven. Thus born what we call the work ethic.

Factory workers did not take easily to the work. People worked grudgingly, they resented the repetitiveness of the work, the long hours, the discipline and grim working conditions.

Management's job was to coerce or motivate people to work, to make production more efficient. They broke down the work process into simple tasks, eliminating the need for skills. Workers became an extension of machines, while their needs as human beings were largely ignored.

Work attendance was irregular at best in the 1860s; some factories kept their gates shut during the working hours to discourage workers from leaving! I wonder if the term "captivating work" is derived from that practice!

Prior to and during World War I, from 1905 to approximately 1917, 10 per cent of the total work force would be absent at any one time, workers changed jobs at least every three years and one third of all workers changed their jobs every year. When Ford introduced their first assembly line in 1913, they experienced a turnover rate of 370 per cent annually!

Both capitalist and socialist industrial societies have attempted to solve the problems of motivation and work. They tried by reshaping the worker to fit into his workplace, giving him the heart of the economic individualist, the bourgeois values of hard work, thrift, sobriety and ambition. The ideal industrial man needed to be all those things, while remaining submissive to managerial control, accepting the employer's definition of performance output, wages and working conditions.

Scientific management argued that the basic goal of management was to provide maximum prosperity for the employer and the employee. It assumed, of course, that individual goals and the goals of the organization were one and the same. Scientific management emphasized structures, regulations, procedures, and performance standards. The classical response of capitalist employers in dealing with worker motivation and productivity, was the promotion of individual piece-rate incentive schemes. This also had another hidden potential advantage, that of cutting into worker solidarity by promoting competition. In *Capital*, Marx noted that such systems resulted in constant friction between employer and workers. Frederick Taylor, in *Piece-rate System* published in 1919, came to the same conclusion but wrongly assumed that workers resisted incentive schemes on economic grounds mainly because rate-fixing was done by guess-work

and not based upon accurate, scientific knowledge. He argued that when the latter condition was fulfilled, conflict between employer and employee would be eliminated. He went on to say that "indeed one of the chief advantages of a well-managed piece-work wage system is that it promotes a most friendly feeling between workers and their employers, and so renders labour unions and strikes unnecessary." This ignored the fact that timing a job did not eliminate the bargaining over its price!

The result of piece-rate motivational pay schemes was the growth of bargaining between employers and workers over the very issue of the definition of a "fair day's work". Industrial engineering and scientific methods cannot judge the real value of a man's efforts or productivity. No matter how accurately a job can be timed, one is still involved in a hassle over its price. Taylorism treated men as if they were interchangeable parts of machines. I would like to quote briefly from a book called *Time, Work-Discipline and Industrial Capitalism, Past and Present,* by E.P. Thompson: "The first generation of workers were taught by their masters the importance of time. The second generation worked 10 or 12 hours and had to fight for a day off on Sundays. The third generation struck for an 8-hour day, the next for overtime. The fifth generation for time and a half and double-time. Workers had captured the categories of their employers and learned to fight back. They had learned their lesson, that time is money, only too well!"

Whenever management has attempted to increase productivity or efficiency by exercising tighter, more bureaucratic control, workers have responded by restricting output, slowdowns, higher absenteeism and eventually by striking.

A SYSTEMS PERSPECTIVE OF WORK ORGANIZATIONS

Prior to 1945, organizational theory and models viewed a work organization as a relatively "closed system". In other words, taking the definition of an inorganic system — "a well defined, tightly bounded system made up of a given number of variables, maintaining internal equilibrium by limiting interaction with the outside environment." On the other hand, an "open or organic system" gives and takes from its environment, it continually interacts with other systems, while maintaining its structure. It preserves itself and develops in the midst of a stream of throughputs.

Organizational systems cannot be completely closed or open, but it is only recently that organizations have accepted the open systems model, and moved the boundary of their system to include other interfacing systems, recognizing that these other systems influence each other and must be taken into account when planning change.

Viewed this way, an organization is an open social system composed of a number of sub-systems which are in dynamic interrelationship with one another and with other systems outside the boundary of the organization. It exchanges information, energy or material with its environment. Thus, an organization not only influences, but is also

influenced by external environments which are turbulent and unpredictable.

In a man-factory environment, there are many factors affecting that system, and external factors in fact often overlap. The understanding of the interdependence of the various sub-systems requires that one first study the whole economic system of which the factory is a part.

For example, a man's or woman's role as a spouse, father or mother, or as a member of a social class will affect his/her values and may influence behaviour at work. The factory may also be a part of the wider social system, influencing the economic structure of a town or region, which in turn may help to determine its social structure.

We therefore recognize that an individual's values are not only shaped by, but also shape the practices and norms of the organization he works for. This view takes into account the individual both as the "definer of" and "agent in" the changes in working environment and social reorganization. Kenneth Boulding, economist and author of *Organizational Revolution* writes:

> "For any individual or organization, there are no such things as facts. There are only messages filtered through a changeable value system."

The shift in values of the '60s towards tolerance of self-expression, self-fulfillment and personal growth, is putting great strain on organizations: there is incongruency between employee expectations of what their working life should be like and what it is really like. Employees feel that they have the right to experience some intrinsic satisfaction from their work. We can argue whether we are going back to preindustrial va'ues or whether in fact we are inventing a totally new future, but the real point is how organizations will react to this shift in values.

Regardless of the reasons for this apparent shift in values, these changes are reflected in all areas of our society and seem firmly anchored. Organizations make serious efforts to respond to employee needs, but traditional solutions such as pay raises and increased human relations training for managers are no longer acceptable solutions with which to face the 1980s.

Industrial psychologists and management experts have concentrated their studies on three basic approaches to motivating workers:

1) setting specific production goals;

2) letting workers participate in the setting of goals and the making of some of the work related decisions;

3) increasing the variety, autonomy, responsibility of scope of a job.

A group of researchers at the University of Maryland found in a recent motivation study of blue-collar workers, that of all motivating techniques, monetary incentives led to an average increase in productivity of 30 per cent. Goal-setting by itself produced only a 16 per cent

increase in productivity, job enrichment 8 to 16 per cent.

While it is true that their study looked only at the short-term results, some conclusions can nevertheless be drawn.

Even with our increased knowledge about human behaviour, we often lose sight of the fact that certain basic economic needs must be fulfilled in a consumer society such as ours. This is especially true in time of great turbulence, or recession and inflation and of general uncertainty about the future. However, we must ask ourselves the question we are trying to find short-term solutions to a temporary problem of productivity decline, or whether in fact this decline in productivity is a symptom of deeper changes occuring in our society.

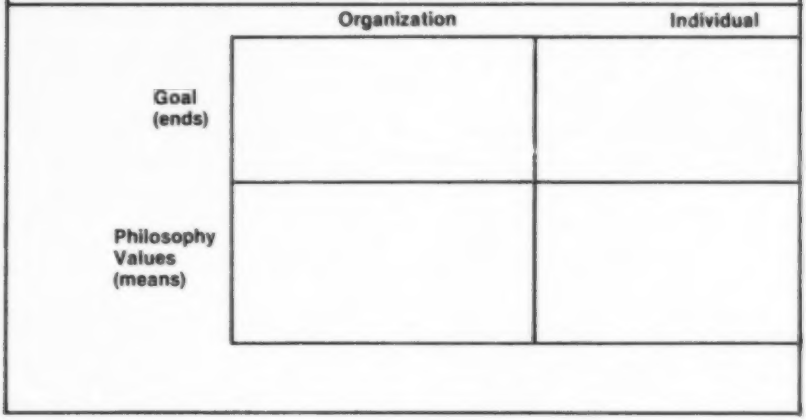
The Quality of Working Life movement and its increasing foothold in organizations which are attempting to cope with today's challenges, potentially offers some solutions. Based on the open system model, QWL approaches attempt to redress the balance between technological and human values. It is a recognition that technology can heavily influence human behaviour and behaviour can in turn influence technology. Sociotechnical system interventions in organizations typically involve the restructuring of work methods, adaptation of technology, or the redesign of organizational social structures. The desired outcome is to optimize the relationship between the social or human systems of the organization and the technology used by the organization. As we have seen, the lack of a proper fit between the two can have highly dysfunctional results, after resulting in an increase in union-management confrontations, and growing worker dissatisfaction.

As we prepare to enter the last two decades of the 20th century, and what Daniel Bell, Eric Trist, Fred Emery, Toffler, and other futurists call the "post-industrial society", some traditional institutions and organizations are increasingly concerned with the need to predict and control changes both in their external and internal environments, while a growing number are more concerned with adapting to change. (Post-industrial society is defined here as a state reached when manufacturing industry becomes so capital intensive and technically oriented that, as a result, it employs considerably less than half, and perhaps as little as a quarter of the working population.)

Changes occur in the culture and are then reflected in the lifestyle of people within the culture. Change is inevitable, but the problem for organizations and individuals is how to react to that change, and develop new organizational forms and behaviours reflecting the new values. "The management of change would present few problems if it weren't for the people who create and are affected by change!" We live in a society of organizations that govern every aspect of our lives. However, increased social awareness and expectations by individuals are making employees of these organizations less and less inclined to accept traditional institutional values, if they are in conflict with their own personal values and goals (see Figure I).

FIGURE 1

BASIC CONFLICT INHERENT IN WORK ORGANIZATIONS



Adaptation to a radically changing, complex environment may well represent the key to organizational survival, and contribute to the solution of emergent social problems. Many of these problems such as energy, environmental pollution, worker alienation, managerial indifference and hostile union/management confrontation are substantially dependent for their solution upon both the technology and social structures controlled by formal organizations. The ability of organizations to interact with and contribute to their contextual environment will depend upon the extent to which they can integrate their organizational and human goals, their technology and their structure in support of broader social goals.

We are concerned with the development of alternative conceptual models that might allow us to better understand the impact of turbulence and change on organizations, and perhaps suggest practical new designs to improve organizational learning and response capability.

We should not lose sight of the fact, however, that organizations are artifacts designed for human purposes. Their effectiveness depends on their continuing redesign in response to changing values and a changing contextual environment. Organizational learning refers to this process of continuing redesign which, of course, cannot take place independently of the individuals within the organization, who by their behaviour, shape the organization itself. Gregory Bateson, a 20th century philosopher, in his book *Steps To An Ecology Of Mind* called this "deutero-learning" or learning to learn.

Most organizations are very reluctant to accept this process,

and consequently, learning mostly occurs as a result of a sudden crisis — a change in the outside environment like a recession, or a revolution from within like labour disputes or managerial changes. The organization reacts mostly as a reflex action to insure its survival, and not out of insightful on-going problem solving efforts.

Management theory makes assumptions about how organizations work. If an organization views itself as a closed system, then it seeks to control the behaviour of its members, and reduce to a minimum any external disturbing influences. It seeks to retain the status quo, and its management practices will be influenced accordingly.

As an organization moves towards viewing itself as a more open system, then it willingly accepts a different management theory which constantly seeks to adjust perceptions and practices that might achieve a more harmonious set of interrelationships with other systems and internal sub-systems (see Figure II).

FIGURE II

EXAMPLE OF FOUR DIMENSIONS OR INTERACTIONS PRESENT IN A WORK ORGANIZATION, FROM A SOCIOTECHNICAL PERSPECTIVE

	Management Goals	Employee Goals
Social System		
Technical System		

QUALITY OF WORKING LIFE: A BLUEPRINT FOR CHANGE

There is an increasing concern in Western societies with improving the Quality of Life. To improve the Quality of Life in the workplace, where we spend half of our lives, is a central part of this emergent value.

Quality of Working Life is, before anything else, a basic shift in paradigm. Thinking of it metaphorically, it represents a change of lens through which we view the world. At the "Global Conference on the Future" held in Toronto in July 1980, P. Schwartz and J. Ogilvy, in their rousing presentation "The

Emergent Paradigm: Changing Patterns of Thoughts and Beliefs", described the term 'paradigm' as follows: "The set of fundamental beliefs, axioms and assumptions that order and provide coherence to our perception of what is, and how it works; a paradigm is a basic world view."

In place of *technological imperatives* of our earlier industrial paradigm, we might now speak of *technological constraints* imposed by a society's will to alter the industrialization process, and recreate what was unique in each job, to allow people to find themselves through their work.

As long as technology remains value-free and distinct from human social goals, then our society will continue to reflect this dualism of industrial man and social man.

Whereas, until recently, most interventions in enhancing organizational effectiveness dealt with improving the process of management, without necessarily questioning the validity of corporate goals, philosophy or structure, concepts of Quality of Working Life raise questions concerning the very structures of organizations and their operant value systems.

QWL (Quality of Working Life) focuses on the quality of the relationship between people and their work. It has to do with employees having more involvement in and responsibility for their total work environment. QWL seeks to lessen the traditional adversarial roles of management and employees in everyday work situations outside of the bargaining table issues. It attempts to resolve problems at the shop-floor level, or wherever they occur.

QWL is something that can't be undertaken lightly, or as a panacea for all industrial ailments. Rather, it is a unique and evolving dynamic learning process which brings together concerns of management, unions and individual employees, in a collaborative mode. There is a recognition that work is a meaningful activity in itself, that work environments are not only technical systems but also complex social organizations. If organizations accept the underlying values of QWL, then a new management philosophy and supportive structures and practices will evolve. Organizations of the future will cease to exist in their own right, and become a closer reflection of the collective values held by their members. They will simultaneously serve their members' interests and societal purposes.

If we accept that an organization is an open system, then before attempting any organizational design or redesign, we must carefully examine each part or "Decision Domain" and the impact of a proposed change. Because each sub-system or domain may have different goals, then we must look at those different goals, and seek to reconcile those that are conflicting.

For example, the goals of an organization may be in conflict with the environment it finds itself in, with competitors, or with interest groups. The organization's mission may no longer be relevant, or its values and traditions outdated. The structure that was originally set up to help an

organization achieve its objectives may now be dysfunctional. Different stakeholders or claimants may have conflicting, competing interests, while the business strategy adopted may be highly wasteful. Finally, the goals upheld by the management process and work system may conflict with needs and behaviours of individual members of the organization.

The "Decision Domains" model is rooted in the systems theory approach to the study of organizations (See Fig. III). It identifies 8 interrelated decision domains found in all organizations. The basic underlying premise may be stated as follows: given the high degree of interrelation among these domains, a change introduced in any one domain will impact upon, and have implications for, all the other domains, and the overall effectiveness of the organization.

The utility of this model for the study of organizations may be measured on both a theoretical and practical dimension. This approach initially contributes to an understanding of complex organizational dynamics by identifying the major components of an organization and tracing the relationships existing among them. Of even greater importance, it enables us to identify and evaluate the consequences of a variety of scenarios dealing with changes prior to their introduction.

New organizations will contain within them the same diversity of ideologies and structures as are found in society. These organizations will have separate parts that are quite different from each other and will not conform to a rigid corporate image centrally controlled. Such organizations will be very effective in dealing with complex environments and help to maximize satisfaction for different members of the organization. However, those organizations will also be subject to more internal conflict and ideological struggle than could be tolerated by most existing organizations today.

In a society where human beings have the capacity to exercise moral choice and free will in their everyday lives, can organizations deny workers these same choices in the workplace? If we readily accept that people are thinking, learning, responsible adults outside of the workplace, then some autonomy and responsibility should be built in to their jobs. Workers can no longer be considered as interchangeable spare parts.

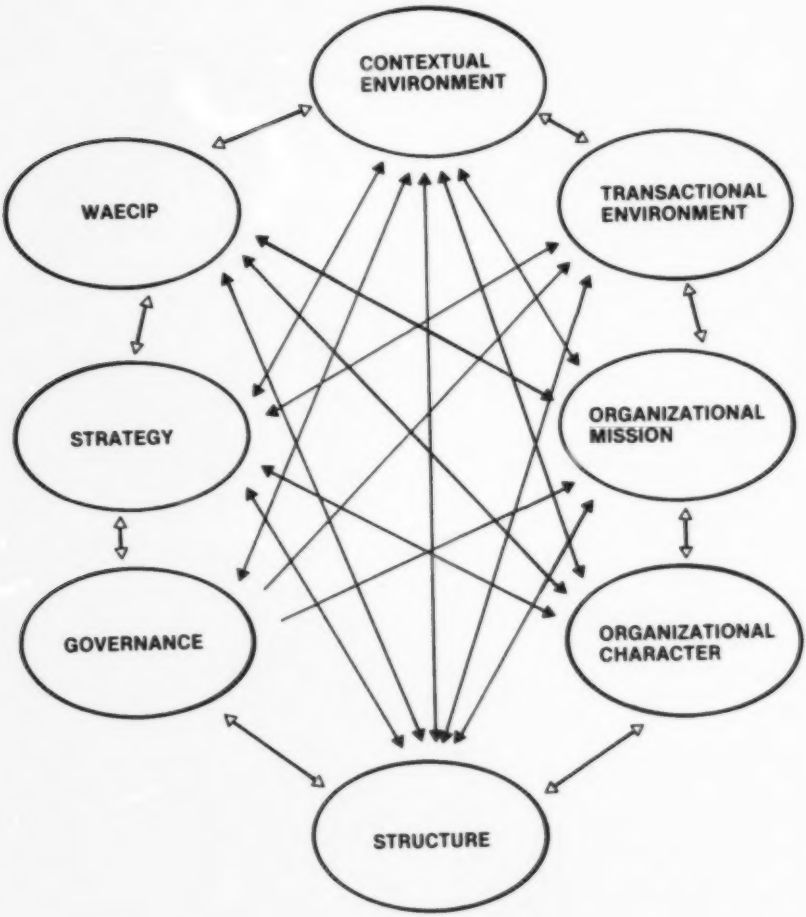
A shift in paradigm would require that the three parties involved in the production process, mainly the state, business and labour, collaborate in redefining the meaning of work in our society. Together, they would outline their respective roles and establish structures that would allow workers greater participation in their work environment; workers would thus be accepted as equal partners in a new social contract.

FIGURE III

Explanation of the eight (8) decision domains:

1. Contextual Environment — This domain describes the issues and trends in the wider social and economic environments which will be important in the future. (e.g., inflation, unemployment).

ORGANIZATION RELATIONS SYSTEM — DECISION DOMAINS



Ref.: "Social Architecture For a Human Future", 1980 — unpublished manuscript H.V. Perlmutter, E.L. Trist.

2. Transactional Environment — At the level relevant to the task at hand (such as the whole organization or a part of it), this domain describes the other organizations, agencies, government departments, etc., that the organization interacts with.

3. Organizational Mission — This is the philosophy of the organization, its "raison d'être", what it is trying to accomplish.

4. Organizational Character — This is the organization's style of operation; its values, traditions, myths and climates.

5. Structure — This domain describes the roles and relationships of the functional units within the organization. (e.g., whether the organization is divisionalized or multi-plant, and the degree of hierarchicalization or levels of hierarchy).

6. Governance — This domain identifies all the stakeholders having a voice in the governance of the organization, e.g., Board of Directors, management, unions, and claimants seeking to become constituents. Claimants can be either outside or within the organizational context, for example, customers or client and employees.

7. Strategy — This is the set of activities by which the organization pursues its mission and by which it manages the claims and demands of the interest groups. (e.g., the strategy of competing with all other companies).

8. WAECIP — This domain describes the internal dimensions of the organization that affect organizational life and management process.

(W) Work System (the set of work-related activities and their organization)

(A) Authority System

(E) Evaluation System (reward and punishment system)

(C) Communication System

(I) Identification System (the extent to which a person identifies him or herself with the organization)

(P) Perpetuation System (the ways the organization tries to ensure its survival)

WORK INNOVATIONS IN THE UNITED STATES

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Americans tend to do things by trial and error, and in dealing with changes in the way they work, they are no different. Whereas changes in European workplaces tend to be guided by government intervention and ideological rationalizations and involve an explicit transfer of authority, innovations in American workplaces are voluntary and pragmatic and involve no such transfer. Despite its random nature, however, much change that has been planned has occurred in American workplaces during the past ten years.

Observers differ about whether work improvement is a fad or a long-term transformation in the nature of work organizations. Scientists differ in their theoretical explanations of why it works or when the conditions are right for it. Managers invariably wonder whether it has application in their organizations, and some union officials are concerned about its implications for the union as an institution. These concerns imply varying conceptions of work innovation and hence indicate the amount of confusion that exists about what work improvement is.

In this article, I want to look at what has actually changed in workplaces, find out what we can learn from these work improvement activities, and derive some principles from what is reflected in the most successful ones. First, though, let us clarify what "work improvement" means and how I will be using it in the remainder of this article.

WHAT WORK IMPROVEMENT IS

The planned changes called "work improvements" have appeared in workplaces in many guises — as "quality of work life," "humanization of work," "work reform," "work restructuring," "work design," and "sociotechnical systems."

Although some of these terms have special connotations for the professionals who employ them, in method and goals the actual activities pursued under the various labels are not very different. I find it useful to distinguish three separate aspects of a work improvement effort.

1. DESIGN TECHNIQUES

The element of work improvement activities that is most apparent is the specific changes in the way

work is organized and managed. For instance, the content of tasks changes when jobs are enriched, work teams affect the way tasks are organized and how they relate to each other, and consultative management gives workers the opportunity to influence decisions that affect them. The techniques may also affect the information provided workers as well as their compensation, security, physical environment, and access to due process.

The techniques employed and their possible combinations are many. For example, in changing assembly methods, auto plants have assigned related tasks to work teams, allowed them to decide how to allocate the work among themselves (provided they meet quality and quantity requirements), and created buffer inventories between adjacent work teams to increase latitude in the rhythm of their work. Also, management and unions in competitive manufacturing situations have designed plantwide schemes to share productivity increases and have structured mechanisms to ensure that workers' ideas for improvement are considered.

2. INTENDED RESULTS

Another aspect of work improvement is the results it is intended to produce. They can be either economic (for the benefit of the organization) or human (for the benefit of employees). The business benefits can take many forms — quality, delivery, materials usage, machine capacity utilization, and labor efficiency. The human benefits can take form as real income, security, challenge, variety, advancement opportunity, dignity, equity, and sense of community. The relative importance of these depends on the needs and aspirations of the employees in question.

Most of the work improvement labels focus narrowly on either techniques or results. For example, "job enrichment" directs attention to the techniques level and only to one technique. The connotation of "job design" is only slightly broader. "Quality of work life" has the same limitations. It refers directly to an objective that can be served in innumerable ways. Moreover, as labels, "quality of work life" and its first cousin, "humanization of work," have serious drawbacks; they refer only to human gains, which in today's business environment need to be closely coupled with improved competitive performance.

In my experience, I have found that organizations can improve business results in a humane way and improve the quality of the human experience in a businesslike manner by identifying the work cultures that promote both improvements simultaneously. Such work cultures are the links between technique and results in my three-level conception of work improvements.

3. WORK CULTURE: THE INTERMEDIATE EFFECTS

The combination of attitudes, relationships, developed capabilities, habits, and other behavioral patterns that characterized the dynamics of an organization is a work culture.

Some changes in the culture, such as high-cost consciousness, responsiveness to authority, and high activity norms, may promote performance but do little or nothing for people. Conversely, under some circumstances, high sensitivity to feelings and concern for the personal growth of the individual are cultural attibutes that may be appreciated by the people affected but may not by themselves contribute to business performance.

In the most successful work improvement efforts, the culture simultaneously enhances business performance and the quality of human experience. In one food plant, for instance, management sought to promote employee identification with goals. Such positive identification increases not only workers' motivation to work but also their sense of belonging in the workplace and their pride in the plant's achievement. Similarly, a behavior pattern that influences both employee self-esteem and the soundness of business decisions is another desirable cultural attribute.

Identification and mutual influence are ideals common to many work improvement projects, but no single culture is ideal for all businesses or all people. What particular set of attitudes, capabilities, and relationships a company should emphasize will depend on its industry's strategic performance indexes and its employees' work life values. Whatever the work culture sought, it cannot be mandated by anyone. It can only be shaped over time by a combination of things — including the techniques by which work is organized and managed.

Let us review how these three aspects of work improvement activities relate to each other.

Techniques are the elements of the work organization that people can alter directly; intended results are the fundamental business and human criteria by which to judge effectiveness; and the work culture mediates the impact of the former on the latter. The techniques create the culture, which strongly influences business performance and the human experience at work.

According to this conception, one's choice of techniques is guided by continuously referring to the type of work culture that they promote, and in turn to projected business and human outcomes. For example, in a paper manufacturing plant, the business ends required that the manpower be flexible, and employees wanted the opportunity to acquire new skills. The plant adopted a design in which teams are responsible for a cluster of tasks and members are rewarded for acquiring the skills to perform all the team tasks. Such a design promotes both flexibility and opportunity. (The three-level conception of work improvement is shown in the Exhibit; the arrows indicate influence.)

The exhibit illustrates how important it is to specify the proper business and work life outcomes for a particular company.

Applying this concept, one is also guided in the quality of choice one should make at each level. As one moves backward in the exhibit from intended results through work culture to design techniques, one's

EXHIBIT
Three-level conception of work improvement

Level I Design techniques	Level II Work culture ideals	Level III Intended results
		For business:
Job design	High skill levels and flexibility in using them	Low cost
Pay	Identification with product, process, and total business viewpoint	Quick delivery
Supervisor's role	Problem solving instead of finger pointing	High-quality products
Training	Influence by information and expertise instead of by position	Low turnover
Performance feedback	Mutual influence	Low absenteeism
Goal setting	Openness	Equipment utilization
Communication	Responsiveness	*For quality of work life:*
Employment stability policies	Trust	Self-esteem
Status symbols	Egalitarian climate	Economic well-being
Leadership patterns	Equity	Security

Note: The design techniques, culture ideals, and intended results listed above are presented as illustrative, not as comprehensive or even universally applicable. And, the items in the three columns are not horizontally linked up to relate to each other. The arrows indicate influence.

stance should become increasingly pragmatic. If the desired outcomes are clear and one's commitment to both business and human values is firm, then one can evaluate cultural attributes and in turn design techniques in terms of their efficacy in achieving the desired results.

Some of the principles that arise out of the three-level conception of work innovation are outlined at the end of this article.

INTEREST IN WORK INNOVATION

Over the past decade, media attention has gradually shifted from focusing on the symptoms of disaffection with work to possible solutions. The amount of work improvement activity in plants and offices throughout the United States has grown steadily, appearing to be on the path of a classical S growth curve, in which growth climbs slowly at first, accelerates, and then slows again. Today, the rate of growth in these experiments continues to increase annually, suggesting that we are approaching the steeper portion of the curve.

Extrapolating from available information, I estimate that an important minority of the Fortune "500" companies are attempting some significant work improvement projects. And, not surprisingly, the companies that have greater commitment to and experience with such projects are among the leaders in their respective industries: General Motors, Procter & Gamble, Exxon, General Foods, TRW, and Cummins Engine. Less prominent but similarly well-managed manufacturing companies such as Butler Manufacturing and Mars, Inc. have also become increasingly active in this area. Citibank is one company with major work improvement efforts in the office environment. Prudential Insurance is another.

All of the manufacturing companies I have listed have regarded new plant start-ups as opportunities to introduce major new work structures. In recent years, major projects have begun in organizations of various sizes (from 100 to over 3 000), with varying technologies (from simple hand assembly to sophisticated continuous flow processes) and in different geographical locations (from upstate New York to the deep South and the West). As these companies extend their innovative work systems to other new plant sites, managers learn from the experience of the pioneers, and the systems cease to be regarded as experimental. Although the diffusion generally occurs slowly, the principles that underlie these new designs usually spread to companies' established plants as well. Let us look at some of these work innovations in detail.

INDIVIDUAL PROJECTS

HBR readers have been exposed to a number of accounts of individual efforts (e.g., the Topeka Pet Food Plant) and to the distinctive approaches of several U.S. companies (e.g., Donnelly Mirrors and Eaton Corporation). Although not fully representative of the diverse practices that one can observe, these experiments do illustrate the growing work improvement activity in the United States.

To my knowledge, the activity of General Motors is the most extensive of any company in the United States and may be more extensive than that of Volvo, whose pioneering efforts have been well publicized internationally. GM's dozens of projects take a variety of forms. One long-term effort at GM began in the early 1970s in an assembly plant in Tarrytown, New York. What began as a "What-have-we-got-to-lose?" experiment in which workers and the union were involved in redesigning the hard-and soft-trim departments' facilities has blossomed into a plantwide quality of work life program involving over 3 500 people.

A different type of project at GM began in 1974 at a new battery plant in Fitzgerald, Georgia, where the pay system was set up to reward knowledge and skills acquisition. After four years, almost all workers there have become familiar with a wide range of jobs and have detailed knowledge of the production process. Initially, inspectors evaluated the workers' performance, but eventually the production teams themselves acquired the responsibility to ensure high-quality performance. Since 1977, work teams have prepared their own departmental budgets for materials and supplies. Managers provide workers with information such as cost data, which is traditionally not shown to them. The sparse and functional offices reveal the prevailing attitude about status symbols.

The pay system, self-supervision, and other design techniques have been combined at the Fitzgerald plant to create a work culture characterized by flexibility, mutual trust, informality, equality, and commitment. Reportedly, the Fitzgerald plant's performance has been very favorable, compared both with other plants and with its own plan. Those

familiar with the plant attribute much of its superior performance to the work structure and to the fact that workers take pride in establishing new levels of output and quality.

Another innovator in this field is as much a leader in nondurable consumer goods as GM is in durable goods but shuns publicity of any of its work improvements. It regards the knowledge it has developed about implementing innovative work systems as proprietary, similar to other types of know-how that give it a competitive edge.

In the late 1960s in one plant of a major division, this company introduced a new work system designed around the idea that workers would be paid according to their skill levels. Under this system, the company does not impose quotas to limit the number who could advance to higher levels. The work system promotes the development of relatively self-supervising work teams. The basic features of this system have been adapted to the six new plants built subsequently as well as to departments in the preexisting, unionized plants of the division.

Because successful work improvement approaches have not always spread to other plants within the same company, it is worth noting why transfer did occur in this case. The acceptance of change in the existing plants has been fueled by their need to remain competitive with the newer plants, which employ more productive work structures. The change has been facilitated by transferring managers with experience from the innovative plants to the established ones. Also, whenever a new technology or project has been launched or major physical renovations planned, work innovations have been introduced in the old plants.

I have observed many of the plants in this company. Without a doubt, their innovative work systems have contributed significantly to the impressive performance of these plants and to the fact that by a wide margin the plants are usually regarded as the best places to work in their respective communities.

Although GM and the manufacturer of nondurable goods are leaders in the field of work improvements, they are not typical. Most companies, such as Butler Manufacturing, have only a few projects. In 1976, Butler introduced innovative work structures similar to the one at GM's Fitzgerald plant in two new plants. In one plant, the program is working exceptionally well; participants are enthusiastic about the work system and think it contributes strongly to their performance. According to pertinent internal criteria, this plant is 20% more productive and 35% more profitable than comparable plants in the same company.

The other new plant has experienced difficulties, and it is less clear that it has benefited from the work innovations.

The experience of a large paper company is also typical. With encouragement and support from the company's chairman, management launched two major facility-wide projects at the time of the plants' start-ups. When I last heard, the paper mill project was regarded

as successful, but the other, in a converting plant, was not. Extenuating circumstances in the marketplace have contributed to the lack of profitability of the converting plant. Also, misjudgments in design reportedly have not been remedied, and optimism is declining.

Most companies experience both success and failure. One large company with four major plantwide projects has experienced almost the full spectrum. A plant that started up with a bold and imaginative work structure three and a half years ago has been very disappointing in terms of economic performance and the work system itself. Local management and union officials judge a second plant to be only somewhat more effective than it would have been without the innovations. A third is solidly effective, and a fourth is a big success according to both human and economic criteria.

The examples I have discussed so far are plant projects, but comparably conceived work improvement efforts have been occurring in office settings as well. In 1972, the clerical work in the Group Policyholders' Service Department of the Guardian Life Insurance Company was fragmented. To process a case file required several steps, each performed by a different person at a different desk in assembly line fashion. Files were hard to find, and responses to client inquiries were delayed. No one person performed or had responsibility for a whole job. Consequently, there was little basis for meaningful recognition of achievement, and morale was low.

The work improvement effort created natural units of work by combining policyholder services and accounting functions for a particular geographic area. The new "account analyst" became identified with a limited and stable set of clients with whom he or she maintained contact and for whom he or she provided a number of services previously assigned to different desks. Control over individual aspects of the work was removed, and individual accountability for overall results was increased.

Although the new work system at Guardian required people to go through complex training, with the result that 6 out of 120 employees could not meet the demands of the redesigned jobs, management reports that the system was effective in producing cumulative increases in productivity of about 33% in four years.

TOP MANAGEMENT INTEREST

Part of the evidence supporting my projection of a continued acceleration of the growth rate of new projects goes beyond concrete activities; it is found in the trend toward increased top management attention to work innovation. Whereas five years ago it was plant or division level managers who invariably sought educational or consultative assistance for potential projects, today it is equally likely that inquiries will come from top corporate managers who are interested in advancing their own understanding of the field, formulating appropriate policies, and promoting constructive corporate activity.

Also, whereas before managers would invite professors to meet with

them and report on developments in the field, today it is equally likely that managers with direct experience in promoting work innovations will address these management groups. For example, the chairman of the board of a major packaging company recently assembled his top corporate and divisional executives to learn about the work innovations of a major automobile company by a firsthand report of the auto company's vice chairman.

A particularly striking example of the trend toward top management interest in work innovations and toward more manager-to-manager consultation on the subject is provided by a November 1977 conference sponsored by the American Center for the Quality of Working Life. Convened for the purpose of exchanging experiences and examining from the "practical viewpoint of operating executives the principles underlying quality of work life efforts and their efficacy in society," the conference was attended by 40 senior executives from Xerox, General Motors, Nabisco, and Weyerhaeuser.

The "blue collar blues" may promote the adoption and diffusion of innovative work designs in a wide range of industries, from blue collar manufacturing work to white collar and service work and in both the private and the public sector, but a major reason companies are trying work improvement projects is competition. Another is the changing expectations of workers, whose consciousness of quality of work life issues continues to rise. Another is the implicit threat of legislation that might set new, more embracing quality of work environment standards or that might require workers to participate in the governance of private industry.

ASKING THE RIGHT QUESTIONS

Despite the many good reasons for attempting work improvement systems, their future depends on how managers approach some fundamental issues and whether they reject the myths surrounding these efforts. Some misconceptions yield easily to more valid assumptions; others appear to need more direct challenge.

HAVE WORK IMPROVEMENTS BEEN EFFECTIVE?

There has been a tendency for people to assume that work innovation projects are either spectacular successes or abject failures. At the expense of some widely held myths, however, people active in the field have become increasingly realistic, recognizing that, in fact, projects can and do fall at every point along a broad spectrum of effectiveness.

I have been deeply involved in 4 major projects and am familiar with aspects of another 30 or so. In terms of their effectiveness in achieving excellence in business and quality of work life outcomes, my impression is that these three dozen projects represent roughly a normal distribution around the mean, just as the effectiveness of more conventionally organized plants would be expected to form a normal distribution.

I believe that the average effectiveness of these innovative work systems is higher than the average of more conventionally organized

but otherwise comparable plants. Certainly, however, the poorly managed innovative plants are less effective than the better managed conventional ones. I cannot offer proof that these assumptions are valid, but the mixed experiences of the companies I have discussed illustrate my observations.

Despite the evidence, the myths persist. I have visited a few innovative plants that were advertised as significantly successful, only to discover that they were at best marginally more effective than they would have been without the work innovations. And I have read reports of the "failures" of previously publicized projects, which, on investigation, I found were faulty. People had blown some difficulties encountered in the design or implementation of the projects way out of proportion.

Why these exaggerations? First, people view such efforts with emotion — some being deeply committed to work improvement activities, others being basically hostile to them. Second, where they are involved, the media deem dramatic successes and failures to be newsworthy. Third, because their expectations are high, people readily see any shortfall as a failure.

Even assuming that work innovations have merit, managers and researchers need to have the realistic expectation that their effectiveness will conform to some normal distribution.

WHAT ARE THE SPONSORS' MOTIVES?

Myths have surrounded the motives of those promoting or undertaking work improvement activities. People see sponsors as narrowly interested in either productivity or the human condition, each at the expense of the other. During the early 1970s, when much interest in work improvement was stimulated by one of the two objectives, these beliefs had some basis in reality, but the situation has gradually changed.

In the successful innovations, managers behave as if both economic and human values count. I am familiar with several major innovative work systems that have taken a long time to become effective (and in one plant remain not very effective today) because management's choices were too heavily influenced by quality of work life considerations in the beginning.

In one case, for example, while stability of assignments and mastery of jobs was necessary to get the plant's new technology under control, employees were permitted to move among jobs and learn multiple skills that would advance their pay. Management later recognized that it had erred in not continuously keeping economic as well as human considerations in mind.

Conversely, I am aware of some abortive job redesign efforts in which management strictly viewed worker satisfaction either as a means to improve productivity or as an incidental by-product. Not surprisingly, management's orientation affected not only what changes were made but also workers' attitudes toward the changes. Many union officials believe it unwise to be publicly committed to productivity as well as to quality of work

life goals lest the former be identified with speedups and other activities that achieve productivity at the workers' expense. Nevertheless, union officials often implicitly acknowledge the legitimacy of improved business results.

A commitment to dual outcomes is congruent with the values increasingly held by knowledgeable people, but also it has proved to be the most practical approach to making significant advances toward either end. Consider the point negatively. When changes in the work structure do not improve the work environment from a human perspective, they will not increase employees' contribution to the business; likewise, changes in work structure that require managers to relate differently to workers but do not also benefit the business are not as likely to be sustained by those managers over time.

One should not confuse a dedication to achieving both results with the assumption that meeting one will guarantee the other; morale and productivity are not necessarily linked. Morale can be enhanced in any number of ways. Rather, a commitment to dual objectives sets in motion a search for the limited set of changes that will promote both human and economic ends.

Some issues will inevitably not yield to dual orientation. Planners and managers will have to make trade-off decisions in areas where achieving human goals can occur only at the expense of the business, and vice versa. Nevertheless, it is more important for those involved in work improvement to recognize that in most work structures there is an abundance of opportunities to make changes that will advance both objectives.

WHAT DO WORKERS REALLY WANT FROM WORK?

Individuals and groups will always express broad differences in the types of work structure they prefer. Therefore, as the multiple-level framework indicates, the ideal culture and the design features of the work structure need to be responsive to the employee population at a given location. Even though researchers and managers are learning which questions about employees' needs and preferences will provide good guidelines to practice, they continue to ask a few either-or questions, which are more confusing than helpful.

Observers often ask variations of the following question: "Are people motivated more by intrinsic factors, such as tasks that use and develop their skills, or by extrinsic factors, such as variable pay for performance and the prospect of advancement?" Both kinds of factor are important, albeit one may be more important to any one group at any one time. The most significant question is how to integrate both extrinsic and intrinsic factors in a practical way.

My observation is that workers in innovative systems have not had to choose between more interesting work and more pay; and that where intrinsic satisfaction has increased, the pay has been improved, reflecting the workers' greater contribution. As Irving Bluestone of the UAW has said of the American worker, "While his rate of pay may dominate

his relationship to his job, he can be responsive to the opportunity for playing an innovative, creative, and imaginative role in the production process."

A related question people often ask is: "Are people more interested in finding meaning in the workplace or in minimizing the time spent there?" While the answer to this question may add to our understanding of the sociology of work today, it is not a productive question for improving current practice. It is better to assume that the work force as a whole would like both in some measure.

But, even if some workers care more about time off than a meaningful work life, it may still pay to heed the lower priority issue because improving the meaning of the workplace may be much more feasible than reducing the workweek. Speculating about workers' desires also leads to the related myths about regional differences and the need for selective hiring. Each myth is built on the assumption that a relatively small subset of the work force has attitudes and talents compatible with work restructuring. I have heard managers assert, "It may work in a plant located in a small town in the Midwest, but workers in the South (or the Northeast, California, big cities, and so on) are different."

If an innovative plant is located in an abundant labor market where supervisors screen, say, six times as many applicants as they actually hire, then their myth may be: "Only one in six is a high achiever who will be receptive to the new work structure. It is okay to redesign work if you can be selective but not if you are in a tight labor market."

Fortunately, since projects are launched in all regions of the country, in both rural and urban areas, in both tight and abundant labor markets, and appear to have a degree of effectiveness not determined by these factors, belief in these myths is weakening.

WHAT ECONOMIC BENEFITS CAN ONE EXPECT?

Managers frequently ask: "How much productivity gain can one expect from work redesign?" Unfortunately, some advocates answer: "One should be able to achieve 15% to 20% improvement in productivity." The question itself is emphatically misdirected, and the response just cited is meaningless without knowing what index of productivity the questioner has in mind and whether it is appropriate. For example, the number of output units per man-hour may not be an important index when labor is a low fraction of total costs. Moreover, prior to analysis of the operations in question, one cannot assume a basis for the estimates.

An inquiry and response should focus on methods by which managers can answer the question for themselves. The form of potential gains will vary significantly according to the technology used. The magnitude of possible gains will depend on how well the unit is already performing and on whether the aspects of performance that can be improved are strongly influenced by employees' attitudes and skills. Finally, whether potential gains ever materialize depends on the quality

of redesign ideas and their implementation.

The following examples illustrate how productivity indexes can take different forms:

• A facility that warehouses and supplies engine parts to dealers and dealer chains could gain new accounts by speeding up its delivery response; it could add very profitable business if it could promise certain large national chains 48 hours versus 72 hours for delivery.

• In a capital-intensive plant that machines casted parts, management determined that it was technically feasible to increase by 15% the maximum throughput of a $10 million segment of the technology manned by 10 employees. The rate has, however, been achieved only for brief periods of time because of the limitations of operating personnel. Running speeds and machine downtime play a similarly important role in other parts of this plant and strongly affect its competitiveness.

• In a relatively high labor-intensive business, management was experiencing a high rate of turn-over. The particular tasks, mostly assembly line jobs, did not require great skill, but learning the idiosyncracies of the company's many different products took a lot of time. While the new employees were learning to deal with these peculiarities, their higher scrap rates and lower labor efficiency significantly affected unit costs. As a result, the turn-over costs were significant.

To assess the potential of work improvements in the foregoing operations, one should ask: "How much difference would it make if workers cared more and knew more about this work?" Let us examine the first example in light of this question to show how one can begin to analyze the situation.

First, one needs some facts: the replacement engine parts center employs about 100 hourly workers; the pay is good for this type of work in the area; turnover is relatively low; and labor relations are amicable. While workers do not especially identify with management and many are known to goof off whenever possible, they are not antagonistic.

After a preliminary analysis of the various ways in which performance is sensitive to employee motivation and knowledge, the management of the center estimated that:

1. Employees could reasonably handle a 10% additional volume, even allowing for increased time to be devoted to training and regular meetings. But the 10% savings would not create a net economic benefit because the wage increases reflecting greater job scope and skills would offset them.

2. The cost of errors (orders lost, wrong parts pulled, overages, underages, or damages in shipment due to carelessness) could be reduced by $100 000 per year.

3. The work system could reliably handle up to 25% of the facility's volume within a 48-hour response time, enabling the management to win over some additional accounts and increase the margins on some existing ones and thereby to add an

estimated $200 000 more profit per year.

4. The potential benefits of $300 000 assumes a work force that cares more and knows more and that is amenable to flexibility in work assignments based on the needs of the business, the latter point being especially critical to reducing the center's response time.

The foregoing analysis illustrates good practice. First, management identified particular points in the system where poor labor utilization, errors, and limitations in response time occurred. It did not rely on global hunches.

Second, by converting potential gains to annual dollar amounts, management could see the relative importance of error reduction and improved response time. Moreover, management could relate the benefits to other factors; for example, $300 000 would be a savings equal to 25% of the annual payroll.

Third, management understood these were potential benefits and not certain gains that would automatically flow from the adoption of some set of design techniques. Its ability to achieve any of these benefits depended on its ingenuity and skill. It always ran the risk that it would not be able to modify the work culture as intended.

Fourth, management knew that for any changes to be effective from a business standpoint, it would also have to improve the work from the workers' point of view.

Managers in the machining operation and assembly unit followed procedures similar to the one just outlined. However, their estimate of benefits took a different form. Because they could spread the large fixed interest and depreciated expenses, managers in the capital-intensive machining operation figured that increasing the output rate of finished parts by 15% would result in lower unit costs. The estimated annual savings represented 150% of the $140 000 payroll for the unit — that is, $210 000.

In the assembly line unit, the managers concluded that it was not feasible to reduce turnover significantly, that only modest improvements in scrap and labor efficiency were possible, and that costs associated with any changes contemplated would largely offset the estimated gains.

In cases such as those just described, management's analyses are limited by the same difficulties encountered in estimating the costs and benefits of untried technologies or management systems — that is, the estimates can prove to be incomplete, too optimistic, too conservative, and so on. Nevertheless, the analytic approach presented here illustrates the systematic and realistic efforts managers should make to assess the potential performance gains.

Which procedures a manager actually uses and the level of detail of the analysis is not the point. The important point is that planners have some systematic approach for assessing potential benefits that might accrue if the cultural ideals

are actually realized. The methodology need not be elaborate.

SOME LESSONS FROM EXPERIENCE

For those who consider undertaking new initiatives and promoting the spread of successful innovations to other units in the organization, I offer the following guidelines. Though not comprehensive, they are nonetheless derived from observations of the contrasts between relatively effective work improvement efforts and less effective ones.

1. *Attempt work improvement because of its intrinsic positive values, not because it might be a way to avoid unionization.* Apart from the fact that I believe in the institution of collective bargaining, trying to avoid unionization has several drawbacks. One is that unions are more likely to join in efforts to adapt innovations to existing facilities if work patterns are not being used as an antiunion device in the new plants. Another is that, although most projects in the United States have been in non-unionized offices and plants, the amount of joint union-management cooperation is increasing. Such projects as Harman Industries, Weyerhaeuser, Tennessee Valley Authority, the Rushton Coal Mines, and Rockwell International attest to the benefit of cooperation.

I stated earlier, GM and UAW have a very active program of work improvement. The approach contractually agreed on by the parties is oriented to quality of work life, but as the Tarrytown experience illustrates, management, union officials, and workers are all genuinely interested in the business results. Irving Bluestone, international vice-president of the UAW, describes the joint GM-UAW program as follows:

"The objective of our quality of work life program is to create a more participative and satisfying work environment. If, as a result of increased participation, unit costs are improved because turnover rates go down and product quality goes up, that is fine.

"But if a plant manager is thinking of a quality of work life project as a means for increasing productivity, we don't proceed. There are certain other constraints — people must not be compelled to work harder, changes must not result in workers getting laid off, and the local and national agreements remain inviolate. The projects must be from the ground up and participation voluntary on the part of workers. The first phase of all projects is to improve the climate of mutual respect between union and management; if this doesn't succeed, there is no basis to proceed on. Plant management and the local union must both be committed."

During the past half dozen years, as work improvement activities have been growing in number, diversity, and visibility, both labor and management have encountered doubt within their own ranks. UAW officials have not found it easy to convince union members that the program is not a management gimmick to increase productivity and perhaps weaken the union.

At GM, managers at certain levels express concern that the program

will result in a loss of authority and prestige. These fears are diminishing gradually but can flare up at any event that seems to support them. Still, the commitment at the top of both organizations has been extraordinary and is bolstered by a growing constituency of local managers and union officials who have had positive experiences.

According to Bluestone, very few projects have actually failed, but more time must pass before the majority of projects currently under way can be declared successes.

2. *Recognize the basic difference between opportunities in new facilities and opportunities in existing ones.* Once, most people assumed that the major innovations introduced in new plant start-ups could serve as inspirational and instructive examples for managements and union officials of established plants. I have concluded that providing examples of what was done in a new organization is not helpful in enabling managers of established units to visualize alternative futures for their units and is not an effective stimulus for developing a program for transforming them.

The reasons are severalfold and go beyond the fact that a particular work structure that is successful in a new plant may be inappropriate in an old one. More fundamentally, the processes of innovation (diagnosing, planning, inventing, and implementing) are significantly different for new and existing units. In established facilities, the level of aspiration for change and the time frame allotted for achieving it must be much more modest than in new facilities.

In selecting aspects of work structure that can be changed, planners need to be opportunistic — doing what they can when they can. Also, the main job of planners in old facilities is defrosting the old work culture and creating a sense of the potential for change. To do this, they need to give careful attention to the participative processes for deciding the direction and method of the change.

Fortunately, the literature is providing us with a growing number of instructive examples of productive change in established organizations. The Tarrytown plant is one such example.

3. *Avoid either-or conceptions of work organization.* An example of this faulty thinking relates to the source and types of controls: "Traditional systems rely on hierarchical controls. The innovative system is the opposite; therefore, it must rely on individual or team self-management." Another example of this thinking is: "If we need to rely on self-discipline and peer group pressure to minimize counterproductive behavior, then there is no place for management-administered discipline."

Indeed, as managers in these work systems have sooner or later discovered, a selective emphasis and sensible mixture of management techniques are called for. A number of organizations have had to go through a period of permissiveness before management discovered the need to set and

enforce certain boundaries on the behavior of members of the company.

Managers make a related mistake when they assume that an organization at start-up can be at an idealized, advanced state of development. Some plans for new plant organization neglect the important distinction between conceiving of the steady state design and designing the initial organization. These plants start up with workers and supervisors having roles and responsibilities that reflect the planners' idealized view of the mature organization. Workers lack the technical and human skills as well as the problem-solving capacities to perform effectively. Supervisors cannot merely "facilitate" — they must provide directive supervision.

Delegation is the cornerstone of new plant development. Such delegation must be rooted in careful diagnosis of the existing base of skills and capabilities in the work force and a realistic view of their ability to develop over time.

4. *Do not advocate one answer; spread a way of looking for answers.* Managers and planners need to inculcate their people with a way of thinking about the diagnosis and designing of innovative work structures, not the work structures themselves. This is a major implication of my three-level conception of work improvement activity. It is less appropriate (and sometimes counterproductive) to promote the spread of particular techniques — for example, enriched jobs, team concepts, productivity gain sharing — than it is to promote the diffusion of a diagnostic and innovative planning process.

PRINCIPLES REFLECTED IN THE THREE-LEVEL CONCEPTION OF WORK INNOVATION

Most effective work improvement efforts have reflected the following principles. I have induced them largely from experience rather than deduced them from social science theory.

1. In designing work structures, it is imperative to be absolutely committed to the results one chooses (shown on the far right of the Exhibit). One should become pragmatic in the choice of techniques to achieve these ends (shown on the far left of the Exhibit).

2. Recognize that no universally applicable set of human preferences and priorities regarding quality of work life exists. Hypotheses about what would enhance human experience at work may be useful, provided that they are tested with the people in question and are revised or discarded and replaced on the basis of that experience. The same points apply to the determination of the business results that the work culture should promote.

3. Accept that most techniques affect business and human results indirectly, altering first the culture of the organization. Even if in their designs planners ignore cultural considerations, the latter will nevertheless surface as the most important elements of the operation. Participants and visiting observers are quick to appreciate

the motivation, cooperation, problem solving, openness, and candor that often mark a successful effort in practice.

4. Imagine the attitudes, relationships, and capabilities that would promote both business achievement and quality of work life in a particular setting, and then use these cultural attributes as proximate criteria for guiding the design of the work structure. In many cases, duality of goals is absent, or the step of idealizing a work culture is omitted, or both. An elaborate methodology is not required, but a certain type of thinking is advantageous.

5. Be sure that at the technique level the many different elements of design and management practice — reward scheme, division of labor, performance reporting scheme, status symbols, and leadership style — are consistent with each other, each reinforcing or complementing the other. When these elements of the work structure send common or compatible signals, the culture will be internally consistent; if they send "mixed signals," people will feel ambivalent. Also, the more comprehensive the planned work structure and the more the design elements are aligned with each other, the more powerful the structure will be in shaping a distinctive work culture.

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A LABOUR-MANAGEMENT CONTRACT AND QUALITY OF WORKING LIFE*

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INTRODUCTION

In the North American tradition of evolving theory from practice, this paper reports what may become a significant innovation in union-management relations. This pragmatically evolved development may be crucial to the evolution of new forms of union-management collaboration. Reported are the extremely rare events of union participation in the design of a new chemical plant organization and the evolution of a new form of union-management contract developed through collective bargaining and responding to the organizational philosophy that guided the design.

During the past few years suspicion and distrust have surrounded the issue of union-management collaboration in the development of work environments and conditions that could provide a rewarding relationship between work and the needs, expectations and goals of those who do the work. Both unions and managements were and largely are immobilized by the uncertainties of departing from the 200-year-old tradition of (1) instrumentalism, i.e., work as an instrument to support the goals of satisfying personal needs of individuals outside the workplace and (2) the external behaviour control of workers to achieve the goals of the organization or of its managers. This immobility characterizes all Western societies at this stage in their evolution. It has led to partially appropriate responses that are either political — (mitbestimmung or union representation on boards of companies in Western Europe) or economic — (Scanlon Plans, earned time bonuses, etc. in the United States, Davis, 1979). In deep and meaningful ways such responses to the new realities of demands to enhance the quality of working life (Yankelovitch, 1979) can be seen as

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**Formerly the Oil, Chemical and Atomic Workers International Union.

either avoidance of the need to develop a new relationship between union and management responsive to the evolving new demands in the work place, or recasting of the expressed needs and expectations into conventional responses of more money, fewer hours, etc. All this is taking place in the face of deep changes in Western societies surrounding the meaning and purpose of work and the relation between society's members and the work of society. Such challenges signal the transition of modern societies from the historical period of the last 200 years, the industrial era, to an evolving post-industrial era.

The attempts of a future oriented union and a future oriented management to develop a new relationship between worker and work confronted both of them with the need to evolve a new and more appropriate relationship pushing beyond the terms of historical union-management relations. Both the union (Oil, Chemical and Atomic Workers International Union) and the management (Shell Canada, Ltd.) came to perceive the formal collective agreement as an instrument that would support or hinder the evolution of new work place relationships, i.e., the collective agreement as a part of the 'social support system'. The collective agreement that emerged from the process of free and open collective bargaining was informed by the shared perception that the contract, as an enabling instrument, would become the central social system support instrument or general constitution supporting the evolution of specific adaptive and collaborative practices.

The recent joint design in Canada of a complex chemical plant for the manufacture of polypropylene and isopropyl alcohol and its organization and followed later by the bargained labour-management contract serve as a crucial learning opportunity. The reasons are that this design is a triple first, i.e., the first joint technical and social design of a highly complex continuous, automated process plant and its interrelated social system or organization; the first joint design undertaken with participation of both union and management; and the first labour-management contract bargained in response to an organization (and job) design which is an alternative to bureaucracy (Davis, 1977). As with other firsts crucial to the evolving post-industrial era such as the engineering design in Volvo's auto assembly plant at Kalmar, Sweden (Gyllenhammer, 1977), this development will intrude and have to be considered in all future union-management efforts directed to forming union-management relationships based on other than adversarial relationships.

To aid our learning from this signal development, we want to explore the background to the organization design of this new plant, the specifics of the design and the content of the labour-management contract. A detailed report of the design is being prepared for publication as a case report.

BACKGROUND TO THE DESIGN

The background to the design starts in the early 1970's when the manufacturing division of Shell Canada,

Ltd. began studies of its own way of managing its workers and utilizing their capabilities. Substantial recommendations were made, some of which were implemented and many of which seemed to be waiting for 1975 when the design of the polypropylene-isopropyl alcohol plant was to begin. The sum of the recommendations of the earlier studies pointed to the need to enhance the quality of working life of refinery and chemical plant workers. Such workers, with good pay and working conditions, were found to be seeking greater control over the decisions affecting their lives in the work place and were inhibited from fully utilizing the considerable skills and experience they had acquired. The usual roles of a traditionally operated organization, enlightened though it may be, imposed needless restrictions on workers. Typical of their comments were: 'I operate a 5 (or 10) million dollar machine but have to obtain approval from the foreman for an overtime meal when I am asked to stay at work beyond my usual departure time'. 'I have to wait for the foreman to arrive to sign off on a maintenance request. All he does is add his signature to the form after he asks me if the work is needed'. The primary concern of Shell management and a major concern of OCAWIU was the physiological and psychological problems associated with shift work.

In the early 1970's the worker issues of remuneration, security, control over work place decisions, shift work, development of self, participation in governance of one's work life taken together came to be called the quality of working life. By the time the design began, the participants were well aware of this concept and that it could be strongly affected by organization and job designs.

DESIGN PROCESS

When the design of the polypropylene-isopropyl alcohol plant was to begin in 1975, the manager who had undertaken the earlier studies was asked to become the internal advisor for the purpose of organization design. In this way the issues of the quality of working life were brought into the design process. Sensitivity to quality of working life issues led senior managers to appoint a concerned and knowledgeable operating manager or superintendent for the future plant. In the tradition of the company, this manager would also have the responsibility for designing the organization, coordinate the engineering, and bring the plant into production. Prior to the appointment of the Design Team, the internal advisor helped prepare the operations manager by reviewing the company's own past studies and examining innovations recently introduced by other companies in the industry. The new operations manager or superintendent was given the sanction to undertake the design of the new organization without regard to the prevalent bureaucratic-scientific management structures and job designs. He had the freedom to recommend viable alternatives developed by the Design Team, suitable to the requirements of the new plant and the new work force.

The appointment of the external consultant led to the introduction of the Sociotechnical Systems design approach and to the formation of a

Design Team and a Steering Committee consisting of senior executives from all relevant segments of the corporation. The Design Team's membership changed over time as it proceeded to design different levels and parts of the organization. By the end of the process it consisted entirely of local managers and union leaders while at the start it had as members, the internal and external advisors, the superintendent, the assistant superintendent, various experts, the superintendent of the related refinery, the managers of the overall manufacturing site, employee relations and corporate industrial relations, and somewhat later, the local and regional leaders of the Oil, Chemical and Atomic Workers International Union. Needless to say, the history of labour-management relations had been and continued to be very good.

The technology and technical system chosen called for continuous processing using various vessels, reactors, and remote control of chemical reactions that could be physically dangerous if not properly done. Equipment and instrumentation costs required a massive capital investment amounting to approximately $2 million per employee. The characteristics of the technology, size of investment, and the small number of employees (150) led to the recognition that economic success would depend on the willingness and dedication of this small number of employees. The recognition that higher levels of technology, frequently accompanied by very large capital expenditures, increase the dependence of organizations on their workers, rather than the opposite as predicted by engineers, was crucial to the design process. This awareness, plus a prior history of examining and searching for work relationships that would reflect the high level of responsibilities placed on workers, led to dissatisfaction with the bureaucratic-scientific management structures prevalent throughout the industry.

The design process began without the union. The design team understood very well the increased dependence on workers coming from advanced technology and was conscious of the need to consider the impact of the new plant on the adjacent existing refinery. The initial process centered on examining what constraints had to be accepted by the initial design team and on exploring answers to the question: 'What kind of society are we going to build in the new plant?' These explorations of social and organizational values led to the formulation of a general charter or organizational philosophy that served as a guide to design and subsequent operation of the plant. The organization philosophy stongly emphasized cooperation, participation, self-control, autonomy, variety, and careers as essential features of the future plant society. Security was not specifically mentioned.

UNION-MANAGEMENT JOINT DESIGN PROCESS

There was considerable discussion regarding union jurisdiction. Some expected that the refinery union would have jurisdiction over the new plant when completed; others thought the union would not. Some said this did not matter since it was management's prerogative to

design and organize work. Others were concerned with the negative consequences of placing a complete design before the union as a *fait accompli*. The consultant to the design team questioned whether excluding the union was contrary to the organization philosophy and to the congruency principle of socio-technical systems design which calls for design methods to be congruent with the features of the organization (Cherns, 1976). All came to see that success of the future operation of this costly, leading-edge technology plant was in various ways bound up with participation by union.

Finally, following considerable examination, the design team recognized that the union would represent the future members of the plant and invited it to join as a partner in developing the design of organization, jobs, rewards, training and controls. Such participation of the union as a basis for successful operation is contrary to conventional wisdom about advanced technology, large corporations, and engineering and management processes.

The union accepted with two stipulations — (1) that it be a full partner in the design process and (2) that it would maintain a high profile. This was quickly accepted. The participation of the union representatives provided the means for capturing and utilizing organizational learning at the shop floor level. Initial concerns were quickly forgotten as the high quality of union contribution unfolded and managers congratulated themselves for their statesmanship.

Later the external consultant had opportunity to interview the Canadian national director of the union. He was asked to indicate why he supported his union's participation in the design process in the face of the history, in North America, of rejection by many unions of quality of working life activities. His reply is very instructive. He said that

> "We would be poor union leaders indeed if we did not utilize the opportunity given us by management to participate in providing for satisfaction of quality of working life needs for workers. If you think that only managers have problems with our members as their workers, then you are unaware that we have many similar problems with our members, particularly younger members. We must grasp each opportunity that becomes available to learn how to find the means of responding to quality of working life issues raised by our members if we are to be a strong viable union".

What was the role of the union in the design process? What was their contribution to the design? Would the design have been the same without them? How were they beneficial to future union members who would be joining the new organization? These questions are difficult to answer because of the relationship that evolved. Quickly managers accepted the union leaders as equals and vice versa. Each contributed as an individual whose membership on the Design Team was highly valued. The team called on its members as experts on the basis of their reputations,

knowledge and experiences. Many proposals were generated through synergistic interaction among team members, whether union or management. Proposals for features of organization and jobs were examined by both union and management for secondary and unintended effects on members at all levels. The union representatives' greatest contributions seemed to be centred on proposals regarding the knowledge and skill modules for advancement, maintenance, working hours, shift teams and their rotation. Additionally the union representatives helped develop the team coordinator role, shop steward role and the Good Work Practices Handbook. The details of the structure of the organization and jobs will be described in a separate publication.

DESIGN PROCESS AND OUTCOMES

Before proceeding with the outcomes of the design process, i.e., the organization and job designs, we need to examine the quality of working life background conditions in North America influencing labour-management co-operation. In 1975 there was great concern, uncertainty, and mistrust regarding quality of working life. Most union leaders, while acknowledging that life in the work place needed improving, saw attempts to improve the quality of working life as dominated by management initiatives undertaken for productivity improvement purposes. They felt they were excluded from domains of concern which had traditionally been theirs. Further, quality of working life developments tended to strongly emphasize direct participation of workers without considering the effects on the representative role labouriously earned by unions. The consequence was either outright rejection of quality of working life undertakings by most unions or conflict with management over so many specifics as to inhibit the start of undertakings.

The design process proceeded to analyse the central character of the technology with which the prospective social system would have to interact. This analysis conducted with the aid of technologists examined the proposed and existing manufacturing process, finding that the process, although continuous and automated, operated with a substantial number of uncontrolled variables. The newest similar plants exhibited a very low level of utilization for a variety of reasons. In response to these findings, the design team opted for organizational forms that would maximize learning and improve response time in dealing with disturbances as they arose. The more that members of the organization could learn to control variables, the greater would be their ability to regulate the process and to increase plant utilization, thus enhancing economic success. Each per cent increase in utilization would yield large economic returns. The computer is off-line which facilitates learning. The necessary computer programmes, were designed so that operators can use the computer in the mode of evolutionary operations. In terms of what was known about relevant variables, the closed loops programmed in the computer actually are the maximum from an optimizing point of view, as contrasted with a controlling point of view. The computer answers queries

put to it by the operating personnel regarding the short run effect of variables at various control levels but decisions are made by the operators. Operating personnel are provided with technical calculations and economic data, conventionally only available to technical staff, that support learning and self-regulation. In this manner, operator learning is enhanced. By utilizing the experience of operators thus obtained, computer programmes can be updated to further enhance learning and so on interactively.

The choice of a learning organization model affected the structure of the organization, jobs, rewards, etc. It supported the structural decision to treat the entire plant as one organizational unit, without any internal boundaries so that wider system learning would take place. It influenced the decision not to create specific jobs or positions with fixed boundaries and job descriptions. The choice made was to have the work to be done belong to a team as a whole. The team could assign, daily if necessary, the needed tasks to its members on the basis of both their skills and competence and the physical location of the operating units. Further, the needs for organizational learning were seen to be best supported by unrestricted individual learning and thus a system of open progression was designed with pay or rewards based on acquisition of knowledge and skills.

The organization structure was most strongly influenced by application of the concept of the organization as consisting of self-maintaining (sociotechnical) organizational units supported by the requirements for learning. Two sets of criteria were applied, namely (1) locate the boundaries of organizational units so that organization members have identifiable outcomes, control inputs, possess the requisite response capabilities in numbers, skills, competences and information; and (2) the sociotechnical criterion (Cherns, 1976), that the identification of response to and access to the source of a disturbance, interruption or variance are within the same boundary. Additionally, the structure was influenced by simultaneously considering it to be a mini-society as well as a transforming (work performing) agency. The mini-society consideration brought into focus functions such as problem solving, coordination, social system maintenance, conflict resolution, individual advancement, equity, work place justice, shift work, etc.

The design selected treated the entire plant and its processes as one organizational unit. One team of 18 people plus a team co-ordinator operates the entire process including laboratory, shipping, warehousing, and many aspects of maintenance on each shift. The teams needed for 24-hour, 365-day operation would be supported by some planners, engineers and managers as well as a team of 14 maintenance craftsmen-instructors and two laboratory specialists on days. The organization design was further influenced by societal issues stemming from strong negative pressures about shift work. The design team sought to minimize shift work and to share equally the positive and negative aspects of working life. The design provides for six shift teams, each consisting of

18 people plus a co-ordinator. Each team rotates and controls, in turn, all the work activities of the plant. Based on the 37.5 hours per week schedule of the plant, 4.5 shifts are required for continuous around-the-clock operation. The design selected calls for 1.5 shift teams, on average, to join on days, with the following groups: 14 maintenance craftsmen-instructors, 2 laboratory specialists, and 2 warehousemen-schedulers. The shift team joins with the maintenance craftsmen to become the maintenance work force while obtaining cross-skill training in maintenance crafts. In this manner, a maintenance response capability becomes available on all shifts for emergency situations, with a concentration of maintenance capability during days. The six-shift team arrangement provides the means whereby the members of all shift teams spend 53 per cent, approximately, of their work time on days. Should a future experiment with the 12-hour day work out then 72 per cent of each member's work time would be spent on days as compared with 33 per cent on days in a conventional shift arrangement.

Thus a team of 18 with its team co-ordinator operate the entire plant including its administrative, laboratory, shipping, warehousing and maintenance activities. Not unexpectedly the organization structure is flat, having three levels — the shift teams and their co-ordinators, operations managers, and plant superintendent. The day foremen level present in conventional refineries and chemical plants is omitted since these people are now staff technical advisors. Within the teams the structure is deliberately amorphous, permitting the team to assign tasks to its members as required. Additionally, for organizational continuity, various leadership functions including planning and co-ordination have been assigned to the team members.

Team members have received training to perform a variety of social system maintenance functions including problem solving, confrontation, conflict resolution, norm setting, etc. Each team has a shop steward who is one of its members. This is particularly useful since very few rules exist and the labour-management contract language is permissive, leaving to team members the determination of their day-to-day working lives. A Good Work Practices Handbook was developed, with union input, which serves as an administrative guide governing specific job-related activities such as overtime meals, etc. What is frequently described in labour-management contracts, making them rigid and subject to legal quibbling, concerning work related activities, is now in the Good Work Practices Handbook. The collective agreement thus remains as the enabling document it was originally intended. The team co-ordinator, who stays with his team as it rotates through the shifts, serves as the intershift team link and the link with management. His major functions are to provide boundary protection for the team, acting as a mediator or buffer between his team and demands from the environment; to provide technical expertise and training on the processes; and to serve as the management representative on the shifts when he may be the only such present. In addition to the shop stewards, the union structure has a

five-person executive committee including the union officers in the plant.

Members of the teams do not have specific job titles or assignments but rather grade levels or competence levels based on the knowledge and skill attained. Advancement depends on qualifying examinations and performance tests covering specific groups of knowledge and skill modules. This arrangement supports open progression and satisfaction of individual differences through the many career paths available to an individual. Each team member must acquire all the process or operations knowledge and skill modules. Some are present in every wage grade level. Beyond this there are choices available for individuals to combine knowledge and skill modules from six specialty areas with operations modules to make up each individual wage grade level. The specialty area skills include maintenance crafts, quality laboratory testing, warehousing and production scheduling. The various combinations provide six career paths among which an individual can choose. The specifics of the paths chosen depend on joint organization needs and individual desires. The interests of the plant and of the individual member come together in the provision and support of training which is always available, reinforced by the system of wage payment and reward. The more groups of knowledge and skill modules learned, the higher the wage level and each member may move at his or her own pace right to the top level. While there is an expectation that everyone would attempt to reach the top level that each individual is capable of achieving, time limits are not imposed for doing so. No one, however, is forced to move and failure to learn and advance cannot impede anyone else's progress. These are norms developed by team members at the start of plant operation.

COLLECTIVE AGREEMENT

As the organization design was completed (some specifics were later added) recruiting, selection, and training were designed. At this time, the union representatives took on dual roles — continuing their work on the design team and engaging in the collective bargaining process for a labour-management contract for the new plant. Participating in the bargaining for management was the manager of the manufacturing centre, the chemical plant superintendent, and the employee relations manager. The union negotiating committee was composed of the local and regional officials who were serving on the design team joined by five of the craftsmen-instructors who had been transferred from the refinery to the chemical plant to form the maintenance team.

After hard bargaining, a first-of-its-kind labour-management contract was developed. As indicated earlier, this contract is unique in that it is the first labour-management agreement developed in consonance with the design of a post-bureaucratic organization giving specific emphasis to achieving high quality of working life for its members. Both union and management representatives at the bargaining table understood the central nature of the new

organization with its emphasis on self-control, learning and participation, its flexible work assignments, and its evolutionary structure based on specifying only what is critical to organizational functioning, i.e., minimal critical specification (Cherns, 1976). They understood that the design was in effect a skeleton structure that would be further evolved from subsequent experiences. This learning was the opposite of their prior experiences in living in bureaucratic organization where all aspects of structure and relationships were completely specified. They agreed that the survival of the organization and enhancement of the quality of working life for its members would come from the detailed structures and practices that would be evolved by those living in the organization, from the participation of members in solving the problems of the organization and from the feedback and utilization of organizational and individual learning.

Both union and management appeared to conclude that protecting and developing the organizational form would best discharge their responsibilities and advance the satisfaction of their own needs and the needs of those they represented. Their shared understandings led to agreement that flexibility and support should be the central features of the labour-management contract. The contract emphasizes and reflects flexibility and is itself an evolutionary document providing enabling conditions consonant with the organization design. It was as if the principle of minimal critical specification had been applied by the negotiators. Both sides made some signal concessions in support of developing the collective agreement. Management did not insist on the customary management rights clause in the contract accepting general rights stated in law. At the same time it accepted mandatory deduction of union dues as necessary for continuity of the union. Not as a concession, the union for its part did not require a seniority clause, except for layoff, since open progression was one of the central features of the organization. With provision of continual training and objective qualification examinations each worker has an equal opportunity to advance to the highest level the individual's aspiration, capacities and energy will take him or her. Under these conditions, the union saw no need for the usual seniority clause.

An examination of the agreement indicates how flexibility and support were translated into contract language. The agreement unconventionally begins with a unique foreword that sets the tone for what follows. The complete text of the foreword is as follows:

> "The purpose of the agreement which follows is to establish an enabling framework within which an organizational system can be developed and sustained that will ensure an efficient and competitive world-scale chemical plant operation and provide meaningful work and job satisfaction for employees. Recognizing that there are risks involved and that there are many factors which can place restraints on the extent to which changes can occur, both management and union support and encourage policies and practices that will reflect their

commitment to the following principles and values:

- employees are responsible and trustworthy, capable of working together effectively and making proper decisions related to their spheres of responsibilities and work arrangements — if given the necessary authorities, information and training;

- employees should be permitted to contribute and grow to their fullest capability and potential without constraints of artificial barriers, with compensation based on their demonstrated knowledge and skills rather than on tasks being performed at any specific time;

- to achieve the most effective overall results, it is deemed necessary that a climate exists which will encourage initiative, experimentation, and generation of new ideas, supported by an open and meaningful two-way communication system."

Ten brief sections following which cover the main issues. These are:

(1) Recognition: recognizes the union as the sole bargaining agency.

(2) Plant Committee: states the union's right to have a plant committee for negotiation or otherwise and to have a shop steward on every team.

(3) Grievances: states only that 'there shall be developed and maintained a system to ensure the prompt and equitable resolution of problems at the Plant'.

(4) Hours of Work and Rates of Pay: states that the basic work week is 37 1/3 hours, that workers are paid on salary, gives the salary levels, and describes schedules, shifts and how they may be altered, overtime pay and shift bonus.

(5) Deduction of Union Dues: company deducts monthly dues for the union.

(6) Seniority: states that seniority applies only to lay-off and defines seniority and conditions of recall.

(7) Vacations: the vacation entitlements by years of service are given.

(8) Statutory Holidays: the ten holidays are described as are statutory holiday pay conditions.

(9) Safety and Health: 'the union, in consultation with team representatives, may appoint two representatives on the Safety Committee... meetings of this committee which have been called for purposes of Safety or to investigate accidents involved in injury to employees'.

(10) Termination of Agreement: gives dates of the term of the agreement and time required for notice of termination of revision.

The contract has not been too kindly received by various leaders of other unions in the region. It has become the subject of widespread discussion as a forerunner of what relations can be developed in support of new forms of organization and quality of working life.

SOCIAL SYSTEM SUPPORT

The first year of the collective agreement was taken up largely by training of new employees, team forma-

tion, equipment testing and some plant commissioning. Actual operation of plant by work teams looks as if it will begin during the second year of the collective agreement. Late in the first year of the agreement, when all workers were on site, the stresses of not having rules or norms and no specific contract language led to some extended developmental meetings between the union executive committee and plant management. Out of these meetings evolved a collaborative social system support mechanism to deal with grievances as called for in Section 3 of the collective agreement. Established was a Team Norm Review Board composed of seven employee representatives, one from each team, three management representatives and the union vice-president. Consensus is required in reaching recommendations by the Board and in introducing new norms. The Board audits team norms. It cannot discipline. In the event that a team member's problem is not resolved at team level, i.e., face to face with the Team Coordinator and Shop-Steward, the member may appeal to the Team Norm Review Board to adjudicate the issue. To date the Board has been an effective vehicle for problem solving and for developing guides at shop floor level.

Later in the first year a Joint Information Committee was established to aid with the very considerable task of communicating and sharing of information among teams who operate around the clock every day of the year. The Information Committee is composed of one Team Co-ordinator and one Team Member from each team making 14 members. This committee should also prove to be an important part of the social system support mechanism by which the organization maintains itself.

The union's view of developments that took place during the first year of the collective agreement is revealed in part of an article written for publication by the National Director of the union. Reimer (1979) states:

> "Our program with Shell Canada, Ltd., at the Sarnia Chemical Plant has received much notice. Programs of this nature and others of course require continuing attention. However, one can already observe that in this "open society" operation, where people speak up more frequently, there is less fear in the plant and indeed higher attendance at Union meetings. The nature of the operation tends to keep the people more informed and the meetings where decisions are made affecting their welfare have a higher priority. I understand there is very little absenteeism and the quality of training and the versatility in the plant are concrete attainments. The more the worker is trained, the higher is his income and management can put him to better use. Our Collective Agreement has a statement of purpose and is about five short pages in length. We expect that nothing will be written into the Agreement arbitrarily and that if anything is added, it will have stood the test of time. It is interesting to note that in this Agreement, management does not incorporate the traditional Management's Rights clause."

The first year under the collective agreement came to an end and negotiations for renewal are completed. Management and union agreed that, with the exception of changes in salaries, the contract finally signed remains the same as the collective agreement described above.

CONCLUSION

The design process and the resulting organization design as well as the collective agreement for this non-bureaucratic chemical plant indicate that there is another path available better suited to the post-industrial era. This path is marked by a co-operative process and by the objective of a high quality of working life for all members of the organization. Once again we see a demonstration of the powerful outcomes of substantive collaboration as compared with confrontation in union-management relations. It may be that only by such collaboration will a high quality of working life be truly provided for the members of organizations.

The collective agreement informs us that the 'contract as an enabling document' is essential to evolutionary design and thus to a post-bureaucratic form of organization. Counter-intuitively we are instructed that high technology increases dependence on workers for economically successful operation. Increased reliance on workers further emphasizes the obligation during design to examine the needs, aspirations and goals of members, i.e., their quality of working life. The joint union-management process more easily satisfies this examination and the development of useful responses. It also demonstrates that shared responsibility for the development of a new organization evolves through union-management collaboration.

We may well close by examining a duality of questions. First, would this innovative collective agreement have been developed without the prior experience of the joint union-management design process? Second, would the new form of organization have survived without the collective agreement as an evolutionary and enabling document?

The answers to these questions are inferential. The long period of working together, the trust developed, the shared experiences, the agreement on organizational philosophy, and the early-on exposure to sociotechnical systems concepts and quality of working life concepts had their effects. Undoubtedly union and management had likely developed a substantial set of shared understandings which served as a base for considering their individual and joint needs as well as those specific to this new form of organization. At this period in the life of the new organization, given both the fragility of any new social system and the open evolutionary form of the design, it would appear doubtful that this new form or organization can survive for very long without the collective agreement as an enabling and supporting instrument.

APPENDIX

Organization Philosophy: Key Criteria to be Incorporated into Organization Design.

1. (a) Employees are responsible and trustworthy.

(b) Employees are capable of making proper decisions given the necessary training and information.

(c) Groups of individuals can work together effectively as members of a team.

2. Advancement and growth to individual's fullest potential and capability.
3. Compensation on the basis of demonstrated knowledge and skill.
4. Direct, open and meaningful communications amongst individuals.
5. Information flow directed to those in position to most quickly act upon it.
6. 'Whole jobs' to be designed to provide maximum individual involvement.
7. System that provides direct and immediate feedback in meaningful terms.
8. Maximum amount of self-regulation and discretion.
9. Artificial, traditional, or functional barriers to be eliminated.
10. Work schedules that minimize time spent on shift.
11. Early identification of problems and collaboration on solutions.
12. Errors reviewed from 'what can we learn' point of view.
13. Status differentials to be minimized.

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PROBLEMS AND SOLUTIONS IN THE QUALITY OF WORKING LIFE

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INTRODUCTION

Improvements in the quality of working life are now the subject of a growing literature and practice. But because the same title, "quality of working life" is applied to a diversity of proposed changes in work organizations and jobs, it gives rise to considerable confusion. The purpose of this paper is to provide a typology of such change programs or objectives and to relate these to the types of problems generated by the factory system. We give special attention to the confusion between job enrichment and the sociotechnical systems approach.

We suggest that current efforts to improve or humanize the lot of the working man are directed at the solution of one or more of four problems which confront him: insecurity, inequity, alienation, and anomie. These four problems represent general categories within which we can place the most modern efforts to humanize work. Each problem has been generated by the nature of work organizations in industrial society.

INSECURITY AND INEQUITY

The major problems confronting workers which arose from the development of factory system and its modern face — the multinational corporation — were those of obtaining security and equity. The factory system concentrated both power and wealth in hands of owners and then managers, and resulted in the coercion and exploitation of working men. Workers responded to these threats by supporting the socialist and labor movements.

In the first century of the Industrial Revolution, only the outcries of reformers and journalists had much impact or drew attention to the problems of the working man. However, at the turn of the century there was a sharp increase in the consciousness of people about these problems and in the efforts made to deal with them. Broadly speaking, the socialist movements were a response to the concentration of power in the hands of owner-managers and the coercion of workers, and organized labor was a response to the concentration of profits and the exploitation of workers.

We suggest that these were problems of late industrial society and that the responses were

generated by these problems. The objectives of workers were those of security of employment and equity in payment. In order to reach these objectives the socialist movement tried to give workers increased power over work organizations, and organized labor bargained for a greater share in the economic returns of the organizations.

It is these demands for security through power and equity through a greater share of earnings that are the real and logical sources for present demands for greater worker participation on the one hand and greater worker ownership on the other. Furthermore, we would emphasize that these modern programs are primarily suitable for solving the problems of security and equity.

Indeed, when one talks to workers in organizations utilizing some form of worker participation, one finds that participatory schemes seem to give the workers a greater sense of security. In worker self-managed factories in Yugoslavia, for example, there are no layoffs. (Decreases in demand for goods or services are shared by decreasing work for all workers.) Similarly, workers involved in profit-sharing schemes seem to feel that they are getting a fairer share of the returns on their work.

We should note here, however, that neither participation nor profit sharing causes workers to report less alienation. Thus Obradovic, French, and Rodger (1970), replicating Blauner's (1964) study of alienation in Yugoslavia, found that even in worker-owned and directed factories, workers reported equal or greater amounts of alienation. This suggests that while quality of working life programs stressing worker directors and/or owners may solve problems of insecurity and inequity, they do not deal with alienation.

Individual schemes are, however, seldom purely political or economic. Practice blurs and combines the analytic types we articulate, and so we should take care not to let it confuse the relationship between types of problems and types of solutions. Thus, profit sharing is also intended to introduce a proprietary orientation and thus enlarge involvement.

Where it does have this effect we would suggest that it has been enlarged to include new management roles for workers. Similarly, participation can and does lose its purely political effects at lower levels of the organization. On the shop floor, for instance, participation has almost no political effects and it becomes transformed into job and work group redesign. Under these circumstances it is a misnomer to call it participation.

TRANSITION AND NEW PROBLEMS

Beginning with 1850 and continuing until the Great Depression in the late 1930s and the Second World War, the big machine of industrialization seemed to be producing a better and better world for everyone with a bigger and better pie to be divided up. Indeed, in the most advanced industrial countries affluence was widespread and poverty redefined to a much higher level.

However, with the Depression of the 1930s this forward rush seemed to stumble. It seemed to mark a turning point in the way people were experiencing work in complex organizations and in the kinds of problems that were generated by the industrial society. Many observers felt that the Great Depression marked the borderline between the industrial and postindustrial society.

By the 1950s or the end of the Second World War these two great problems of security and equity no longer seemed so acute. In most industrialized countries there was considerable protection in the law, and in all of these countries powerful labor unions were offering excellent protection in large sectors of the society. As though released by the amelioration of these problems, new ones appeared.

The appearance of these new problems, which we have called alienation and anomie, though the labels go back to Marx on the one hand and Durkheim on the other, were a consequence of two kinds of changes which increased in importance during and immediately after the end of the Second World War.

ALIENATION

Marx (1956) wrote of alienation as a condition in which:

> Work is external to the worker... not part of his nature,... he does not fulfill himself in his work but denies himself, has a feeling of misery, not of well-being, does not develop freely a physical and mental energy, but is physically exhausted and mentally debased.... It is not the satisfaction of a need but only the means for satisfying other needs.

Thus, alienation is a condition involving a detachment between work and the self. We would suggest that such detachment would arise when work was seen as damaging or deprivational to the self. This would, of course, depend on how the individual saw his own needs in relationship to his work. It would be a product of a gap between expectations and fulfillment.

In Western industrial societies such a gap resulted from the revolution of rising expectations. Schools, the mass media, and rapid communications gave people new images of what human beings could expect from life. There was a kind of democratization of the expectations of fulfillment. Similarly, widespread affluence made people forget the old problems of security and equity. They now wanted satisfying, interesting, and relevant work.

This was certainly a part of the explosive reaction of students in the late 1960s. As Westley and Westley (1971) demonstrate, this revolution in rising expectations on the part of the educated and affluent young produced new demands on work which work organizations often failed to meet.

Work itself remained much the same or became increasingly fractionated and boring. Managers, sensing that they were losing control over cause and effect relationships, responded with increasingly tight and complex mecha-

nisms of planning and control. In this they were inadvertantly aided by the unions who bargained for increasingly precise definitions of rights and duties and a remunerative specification of obligation and commitment.

The overrationalization, which manifested itself on the shop floor in the fractionalization of jobs and the practical disappearance of discretion (Braverman, 1974) along with increased supervision, seemed to generate increasing alienation. In other words, it generated a psychological withdrawal from involvement with work; the sense that work was not the place for one's central life interest. This was accentuated by rising expectations. It is expressed in an increased stress on leisure activities. We may call this set of responses and problems the psychological effect.

ANOMIE

There was also a sociological effect. Dramatic increases in the size and complexity of work organizations just when they were struggling with increased demands from a turbulent environment led to sharp increases in the rationalization of work organizations. This had two consequences. First, the combination of organizational rigidity and environmental turbulence led to a weakening of knowledge about cause and effect relationships, and thus to a loss of meaning.

Second, there was an intensification of efforts to reduce unpredictability, which took the form of increased control of workers through mechanization, programming, and/or supervision. In other words, there was an increased withdrawal of discretion from work and rationalization of work which emptied it of its normative content. The decreased understanding of cause-effect relationships and the denormalization of work made it increasingly anomic.

Rationalization in itself seems to produce anomie. To quote Phillip Herbst (1976):

> When Hannah Arendt in the discussion of the Eichmann trial talks about the banality of evil, what I think she points to is that inhumanity within the modern civilized world derives from the willingness of man to sacrifice others and sometimes himself to his logic and thus an inability to see that logic as such has no value but people have.

Durkheim (1951) found that the breakdown in moral rules arising from a breakdown in the community left people with a sense of despair and meaninglessness. He referred to this condition of moral lawlessness as anomie. He demonstrated that it can increase the incidence of suicide.

Much has been said about the disappearance of the Protestant ethic, and that argument is appealing, but we would draw attention to the simple fact that values are always imbedded in communities or collectivities and that work has become detached from such settings. The result is that work is no longer governed by moral norms; it is detached from values. To the extent that this is true, we have anomie at work.

Many observers have noted that work is no longer the central life interest of the majority of industrial workers, and that they take a highly instrumental attitude toward work, finding it of little intrinsic interest. People work for money and they tend to take jobs providing them with the most money. In some sectors like nursing, where work was clearly the central life interest, there has now appeared a gulf between older and younger workers. Older nurses still feel pride in craft, and dedication to their work leading to a commitment to the patient which overrides time and place.

Evidently younger nurses tend to see their job as specialized and take a much more instrumental attitude toward it, believing that they should do only what they are paid for and what is written into their collective bargaining agreement. The same process happened long ago in many areas of industrial work in which older workers found that their craft skills and experience no longer resulted in differential pay and power.

There has been a shift in expectations from work based on normative power and moral involvement to that based on remunerative power and calculative involvement. The ideal typical industrial society has become one of functional rationality dominated by logic and the remunerative-calculative axis. The logic of scientific management, of binary computerized controls, of simulation, of decision and systems theories rests on such assumptions of rationality and of the quantification of motivation, satisfaction, and relationships.

Yet, the rational bureaucratic remunerative-calculative civilization seems to contain the seeds of its own destruction. We suggest two reasons for this.

First, the very rationality of calculation destroyed sociocultural systems with their moral bases for action. Using morals and values interchangeably and religion as their focus, it seems that morals appear irrational and are thus eroded by rationality. In simple terms, whereas in the past people acted because they felt they ought to do something, now they act because they are paid for doing it.

Under the impact of the remunerative-calculative power of modern business and labor organization people are taught, indeed forced, to substitute calculative for moral reasons. As they do so, values are eroded and meaning withers. So work becomes meaningless... and anomic. One does not understand why one is working.

Second, the success of industrial societies with their accent on power and money erodes the need which legitimizes them. It does not make sense to people who have never known hunger or coercion to devote themselves to a system primarily oriented towards solving these problems.

An important part of the revolution of the 1960s was the rejection by affluent and secure young people of the emphasis on power and money (which were taken for granted) and their demand for satisfaction and meaning. In other words, they demanded a return to normative-moral orientation.

WORK SATISFACTION

We have been suggesting that the impact of social change on traditional work organizations has produced alienation and anomie among workers. Yet, as Strauss (1974) notes, survey researchers consistently report that most workers are satisfied with their work and that the levels of satisfaction have remained consistent for long periods of time. Apparently, these findings refute claims that younger and modern workers are increasingly alienated and anomic.

We would also note that researchers using the case study method support our claims and report that workers are angry, unhappy, reluctant, and often hostile and bored.

What then is the explanation for these contradictions? One possibility is that dissatisfaction, alienation, and anomie are basically different phenomena. As Hertzberg et al. (1959) pointed out, dissatisfaction is a response to a sense of relative deprivation in security and equity. Thus, surveys questioning satisfaction with work are really asking whether the workers feel that in their jobs they have adequate security and equity. This would suggest that surveys finding that most workers are satisfied simply tell us that in our society most workers do not feel relative deprivation in security and equity.

We have no comparble language for alienation and anomie. In searching for a vocabulary, one might consider whether people feel that they ought to work, and that their work makes them feel like "good" people. How, for example, do they feel about being absent? Obviously, a person who feels that it is all right to be absent (providing that it does not threathen his job security) does not feel that he ought to be at his job or that his work is self-enhancing. Clearly, both absenteeism and turnover can reflect a lack of commitment to work and the feeling that it is not self-enhancing.

In Etzioni's terms dissatisfaction reflects inadequate remuneration, alienation, a feeling that work is personally damaging, and anomie, a lack of moral involvement.

People who have obviously moral and involving jobs, like doctors, teachers, and social workers, do feel that they ought to be at work and do find their work self-enhancing. Yet even they may feel that they are relatively insecure and underpaid. When they organize and collectively bargain for improvements in security and pay, they often erode their normative commitment. It is as though a preoccupation with a primary need represses and, we would suggest, even destroys other needs.

Certainly, as we suggested earlier, the bargaining process seems to have an inner logic which transforms all needs and orientations into a calculative and contractual mode and thus effectively destroys all except those needs that money can buy.

ALIENATION — ANOMIE

While these concepts do refer to different aspects of the work experience (mainly the psychological and

sociological, respectively), they may find the same expression. Just as feelings of insecurity and inequity are both expressed as dissatisfaction, alienation and anomie may be expressed as withdrawal, as a lack of involvement. We would suggest that the strike is the primary symptom of dissatisfaction, and absenteeism and turnover the symptons of withdrawal.

THE DISTINCTION BETWEEN JOB ENRICHMENT AND AUTONOMOUS WORK GROUPS

We have suggested that job enrichment is essentially individual, psychological, and asystemic, while a sociotechnical systems approach to job and work group redesign is essentially group, sociological, and systemic. This distinction may be related to the origins of the two types of work reform. Job enrichment grew out of the ideas of Herzberg and Maslow, both psychologists.

It rests on an analysis of jobs to identify deficiencies in their capacity to meet some set of psychological needs. While meeting these needs sometimes requires a redesign of the social setting of work and the construction of work groups, these steps are not essential and the job alone may be redesigned.

In contrast, the sociotechnical systems approach seems more sociopsychological. Originating in the work of Lewin and Trist, it rests on the analysis of the technical and social systems of work and thinks in terms of the design of work roles rather than jobs. The semiautonomous work group is a logical outcome of this approach. A source of confusion is that the sociotechnical approach also uses and argues in terms of a needs schema. We suggest that this is because it is meant to include job enrichment.

However, it is of the utmost importance to recognize that the essential contribution of the sociotechnical approach is in distinction to that of job enrichment is that it builds a work culture, a normative system, and activates social values. This is why, as Wilkinson (1970) has noted, the sociotechnical appraoch is a bottom-up type of redesign and change, in contrast to job enrichment, which is usually top down.

The two characteristics of the sociotechnical approach which are critical to the normatization of work are its bottom-up approach to redesign and its group-system perspective. The argument is simple. When workers place themselves into semiautonomous work groups, this means that external controls have been removed and internal controls have to be constructed. Since in a bottom-up design the workers themselves are doing the construction, they tend to follow the pattern of all informal groups and to control behavior through reciprocal moral expectations.

They legitimate these norms through reference to the values they have been socialized in — the basic values of their society. Essentially, this is a process of the activation of values and it results in a moralization of conduct. Thus external rational-bureaucratic controls are replaced by social norms. People

then behave because they feel they ought to and because they want to, not because they are forced to or paid to.

Evidence for this normalization of behavior comes from three sources. First, the problems in the intraorganizational diffusion of sociotechnical innovations. If the sociotechnical designed semiautonomous work group or plant creates its own culture and controls behavior through norms based on activated values, then it will become alien to its host organization. Its members will make new and different demands. They will make decisions, and justify them in different terms. This means that they will be an irritant and a threat to the larger system.

Then the managers of that system (who are really the middle managers) will see the new subsystem as being mismanaged. They will see that it does not follow the rational-bureaucratic-mathematical approach followed by everyone else. They will be especially suspicious of the boundary role players, who, since they get caught up in the norms of the experimental group, will tend to act unexpectedly. In other words, we see the alien culture of the experimental unit as being the major impediment to its subsequent diffusion.

Second, the closest analog of the sociotechnical semiautonomous group approach seems to be the task-force-oriented organic system. Speaking of such systems, Burns and Stalker (1966) indicate that they are distinguished by rules — by everyone citing rules are norms.

Finally, we would note that many experienced change agents and consultants report that you cannot change people; people change themselves. Why is this true? We suggest that in the case of social groups it is because it is only through the construction of a normative system that new behavior can be anchored. When a group of people come to believe that their members ought to act in a certain way, they exert moral pressure on members to do so and the new behavior tends to stick.

CONCLUSIONS

Table I summarizes the four dimensions of the quality of working life. All four are necessary if work is to meet the needs of man, and clearly improvement in one or all would be welcome. The great majority of jobs, even in industrial societies, lack adequate security and equity for workers. As long as men's livelihood is not adequate or secure, they will and must devote their major efforts to it. The fact that these jobs are alienating and anomic will be obscured by that struggle. Yet these characteristics remain serious problems, and problems which, as we have suggested, are surfacing in our time.

To the extent that our analysis is true, it should have two consequences. First, by distinguishing the different problems and relating the solutions to them, it can provide guidance for people in the design and redesign of their work organizations. Thus, if the problem is one of insecurity or inequity, then it is advisable to provide programs which deal directly with that problem — programs which provide more job security and pay. However,

if the problem is one of alienation or anomie, increases in money and power should have little or no effect. They are in fact inappropriate solutions to the problem.

Second, by making change agents and social scientists aware of the normative-cultural characteristics of sociotechnical designed groups, it may enable them to find ways of assisting such groups to develop moral norms, and/or adjusting host organizations to these characteristics of their new subsystems. For example, permanent vertical slice representative policy groups (like Browns' (1965) works council at Glacier metals) could make the organization itself normative and thus congruent with its normative subsystems.

TABLE 1

ROOTS OF THE QUALITY OF WORKING LIFE

Kinds of claims made on work organi-zations	Work problem*	Agency for solving the problem	Indicators	Proposed remedies
Economic 1850-1950	Inequity	Unions	Dissatisfaction Strikes and sabotage	Co-ops Profit sharing Productivity agreements
Political 1850-1950	Insecurity	Political parties	Dissatisfaction Strikes and sabotage	Worker self-management Worker directors Worker councils
		World War II		
Psychological 1950-present	Alienation	Change agents	Sense of detachment Absenteeism and turnover	Job enrichment
Sociological 1950-present	Anomie	Self-development groups	Sense of meaninglessness Absenteeism and turnover	Sociotechnically designed work groups

*Walton lists these four problems as needs which work must fulfill. His terms are: security, equity, individuation, and democracy, and they bear more than a passing resemblance to the four problems listed above. However, I came across Walton's list after I had formulated my own.
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TRADE UNIONS AND WORK ORGANIZATION EXPERIMENTS

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INTRODUCTION

The issue of improvement of the quality of working life is nothing new to trade unions. In fact, their very aim is to protect and promote the interests of their members, and therefore, needless to say, to improve their working conditions and more generally, the quality of their working life.

Admittedly, however, union activity has traditionally been confined to the traditional forms of work organization. In general, it seems that as far as innovation in the workplace or new work arrangements are concerned, unions have had little influence. It is true that one of the first innovations of our era, namely, the Scanlon plan, is due to a union leader. But on the whole this remains an isolated case. It should also be remembered that this initiative originated in the rather unusual circumstances of impending bankruptcy or the dismissal of several workers.

THE UNION SPHERE OF ACTIVITY

To illustrate this point, let us consider the terminology used by Eric Trist to describe job properties. Trist distinguishes between the extrinsic and the intrinsic factors related to work. With respect to the former, first of all, the author lists the following: fair and adequate pay, job security, benefits, safety and health, and due process.

Needless to say, all these factors are and have been the target of union objectives that are to be attained. Perhaps, in this respect, union influence has not been or is not as strong as labour leaders and workers would like. Although every individual and every group may have its own aspirations against which it measures its achievements, few people would be able to negate union influence regarding these extrinsic aspects of work.

Moreover, the importance of these elements to the worker should be emphasized. No union could pass them over in favour of another goal or any other form of action. For example, of what use would job variety be to a wage earner unable to make a decent living? What good would autonomy be to a worker whose health is threatened by his

job? There are, therefore, certain basic conditions that must be met, and it is normal for unions, given the objectives they have set for themselves, to use all their influence in order to attain them. Thus, when union leaders claim they have always worked for improvement in the quality of working life of their members, we can't help but acquiesce. These extrinsic aspects are part of the basic conditions that must be met.

However, in looking at intrinsic work factors, in examining these factors around which a good number of innovative experiences revolve, it becomes apparent that union influence has been much less pronounced. These intrinsic factors put forth by Trist are the following: variety and challenge, continuous learning, autonomy and the opportunity to use one's own judgment, recognition and support, a desirable future and meaningful contribution to society.

Union influence on the workplace with respect to these factors does not seem to have been as great as Taylor's. One could even venture so far as to say that unions have simply been following in the tracks of "scientific management", as the authors of the report *Work in America* have pointed out. They have written the following on this point:

> "In part because of this success, labor has continued to emphasize extrinsic rewards for workers. But the union strategy of only bargaining for extrinsic rewards has begun to show signs of wear."

They add:

> "Clearly, the prime responsibility for improving the quality of working life rests with employers. But as Taylorism could not have succeeded without the acquiescence of the trade unions, the reversal of the effects of these efforts will likewise require an active and responsible union role...."

It would be risky to accuse or blame the unions for having used their influence mostly in demanding and improving extrinsic job factors. There are many reasons — sociological, economic and legal — which largely explain their course of action and their activities. Needless to say, of course, unions do not operate in a vacuum. They are subject to environmental pressures. Moreover, certain internal pressures orient the actions of labour leaders as well. The rest of this article will attempt to elaborate on these factors or pressures in order to better understand union action.

ECONOMIC PRESSURES

Unions and their leaders cannot be isolated from their economic environment. Moreover, as one author has already put it, "a union is a political agency operating in an economic environment".

The economic environment in which unions and wage earners develop cannot help but cause emphasis to be put on economic demands such as higher salaries and benefits. The high inflation rates that Quebec and the rest of Canada have experienced in the past few years cannot help but lend importance to aspects involving salary. Likewise, the influence of the consumer society

cannot help but increase the emphasis put on monetary gains and benefits. Moreover, the considerable number of unemployed workers and the unstable economic climate must not be ignored in this discussion of the economic aspects. These elements cannot help but lead to the negotiation of greater job security in the form of various layoff and subcontracting clauses, to give just a few examples. They cannot help but lead the wage earners and their representative organizations to give priority to these demands, often labelled as traditional, at the expense of the organization of work itself.

It should perhaps also be added that these negotiations on the so-called traditional clauses are often turned down by employers. North American administrators have always been possessive of their management rights. These managers have therefore preferred and still prefer that negotiations focus on salaries, for example, rather than on the restructuring of jobs or work groups. An agreement on salaries can at least be included in financial statements and in budget estimates. Often, the costs of such an agreement can even be recovered through the consumer or the users of the product or the service. In contrast, an agreement concerning work humanization factors can result in unforeseeable consequences and costs, not be mention the uncertainty of the results relating to employee satisfaction or an increase in productivity. Therefore, when faced with hypothetical answers, employer negotiators prefer to avert union demands concerning work innovation. By this very fact, they close the door to the power that unions would acquire in negotiating such issues as job enrichment or, more generally, work organization.

LEGAL PRESSURES

Negotiations between employers and unions take place within the framework of the Labour Code or its equivalent, according to the province or state concerned. These acts are a direct result of the *Wagner Act.* From this legislation the lawmakers have borrowed the concept of the certification union and union monopoly through the certification unit, and have copied from it the mechanics of negotiation and the settling of disputes. These acts therefore provide for the existence of a union that has succeeded in obtaining the membership of the majority of the members in a certification unit. Along with the employer, the union negotiates the working conditions of its members for a definite period of time. If it happens that the negotiations fail, the opposing parties can resort to a strike or a lockout to uphold their demands.

As it has been designed, negotiation is basically a test of strength between two social groups or partners, which could be more readily called social adversaries. From this test of strength results a collective agreement which is usually to the advantage of the party with the greater bargaining power. This agreement, which is often referred to as an armed truce, has the power of law between the two parties. During this truce, the parties submit their grievances to a third party or else let their

frustrations accumulate until the next round of negotiations.

This legal environment, as it now exists, does not encourage collaboration between the parties. This type of labour-management relations puts emphasis on confrontation rather than on cooperation. It therefore becomes difficult for the parties in this context, to discuss the humanization of work or other topics which do not very well lend themselves to confrontation.

Two levels of discussion could obviously be suggested, the first level enabling each party to resort to the classic pressure tactics in order to attain their objectives. Salaries, benefits and the other clauses which traditionally form the subject of collective agreements, could be negotiated at this first level. On a second level, there could be an ongoing discussion of job enrichment or of the humanization of work in general.

Such a mechanism, although it offers several advantages, does present some difficulties. It is indeed difficult for the opposing groups to move from cooperation to confrontation, according to the topic under discussion. First, it may be difficult to distinguish bluffing from the truth, blackmail from sincerity. Then again, there is always the fear that information used in an exhange will afterwards be used in a conflict. Last of all, it is difficult to draw a definite line between what is material for collaboration and material for confrontation. For example, the modification of job content lends itself equally to collaboration and to confrontation. Is this not an important stage in the humanization of work? Moreover, even if several decisions or actions lend themselves more to open and sincere collaboration, the implementation and the results of such actions can only be determined through confrontation. Who will pay the costs of job restructuring, for example? How will the fruits of increased productivity be distributed? These are some topics for dispute!

One could of course maintain, in regard to these legal pressures, that there is nothing to stop monetary gains from being demanded at the same time as a new work arrangement. Demands such as these are not contradictory or irreconcilable. In practice, however, the reality is different.

Negotiation, as outlined by our Labour Code, essentially implies compromise. Union demands, and employer objectives for that matter, are rarely obtained in entirety. The parties must therefore establish an order of priority in their positions. Taking into consideration, for example, economic pressures and the needs put forward by the workers themselves, chances are that the priorities will be related to the economic clauses. Few union members will go on strike simply to support their demands concerning the intrinsic aspects relating to work.

Furthermore, contrary to what is found in many countries, benefits are obtained here following negotiations, and not through legislation. This system therefore obliges union members to concentrate their negotiation efforts on a broader range of items. In consideration of the

necessity and of the interest of these benefits to the workers, the latter are prompted to give priority to the clauses dealing with social benefits to the exclusion of less tangible items such as the humanization of work.

EMPLOYER RESISTANCE AND UNION FEARS

In setting up labour relations in a balance of powers, the Labour Code not so much encourages confrontation as it reflects it. Although employers and employees do have certain interests in common, certain aspects of their relations are nonetheless provoking. On the one hand, the employer needs manpower to operate, just as the wage earners are dependent on the employer for keeping their jobs. In this respect, growth of the enterprise is everyone's concern. However, on the other hand, sharing this growth, to use the same example, ultimately cannot help but obey the laws of the power struggle. This can only lead to conflict.

In keeping with this logic of our labour relations, history shows that unions have rarely been wanted or accepted by employers. Often viewed as threats to management power, unions have usually earned their right to exist at the cost of a number of struggles. Management has learned to live with unions today, although it is not in all cheerfulness that they accept them. Far from being a love affair, it is more like a forced marriage. In this kind of context, it is therefore difficult for the unions to accept to collaborate with the employers; distrust still exists.

Unions fear, among other things, that employer initiatives aiming from the humanization of work intend to reduce the usefulness or the effectiveness of trade unionism or simply to eliminate its presence. For example, autonomous work groups, or simply collaboration between employers and workers, can decrease the necessity to submit a matter to a unit of representation such as the union. Thus, the fact that employer initiatives often appear to be a form of manipulation aiming to increase productivity also helps to create an apprehensive atmosphere within the unions.

Nor should it be forgotten that in order to overcome employer resistance in this context of the balance of power, the union must ensure it has the solidarity of its members. Therefore, several work innovation experiments aiming to create autonomous or semi-autonomous work groups are often viewed as a threat to solidarity or to the ties that bring the workers together. They provoke the fear of separating the members of the certification unit and intensifying the egoism of small groups, as R. Tchobabian has expressed it in the *International Labour Review:*

> "The existence of autonomous groups... is likely to make it harder to present a united front in pressing union demands. A strike in an autonomous work group is less disruptive than a united, plant-wide strike. Moreover, trade union action in the undertaking may be seriously complicated by the dispersal of workers into a number of autonomous groups; for instance, it will be more

difficult for union representatives to make contact with them.

"... One consequence of these difficulties may be the appearance of a new type of workers' representation concerned solely with the problems of the group concerned. This 'group egoism' is feared by many trade union organizations."

INTERNAL POLITICS

By definition a union is a group of workers that have joined together. As Arthur M. Ross has stressed, however,

> "The trade union is not only a group, but an institution as well: it leads a life of its own, separate and distinct from the lives of its members. Its problems are not merely those of the particular individuals it happens to represent at one point of time."

The author adds:

> "...the central objective of the union must be defined as institutional survival and growth."

In order to attain these objectives, labour organizations must necessarily retain their membership and increase their numbers. An increased membership means a more sizeable influx of funds, better services, increased control over job offers, greater pressure that they will be able to exert, etc. In order to retain their membership or to recruit new members, unions must offer a program of action or be able to show a list of achievements that will gain the approval of the workers. Considering the environment we have described, this list will no doubt be full of the traditional clauses of collective agreements.

A union that has succeeded in effectively bargaining on behalf of a group of wage earners for job security, good salaries, and attractive benefits is not likely to lose its members. Furthermore, if the employees consider themselves well protected by an adequate grievance procedure, the chances of their changing union allegiance are greatly reduced.

If, moreover, this union attempts to recruit new members among a group of non-unionized workers or to practise raiding among the members of another union, its arguments must be in line with the particular needs of the group in view. These needs will no doubt be financial or involve security. Few unions would succeed in recruiting members by putting emphasis on so intangible an item as the humanization of work. Moreover, if it is not sure of succeeding in the short term in this new situation, or if it does not know exactly how to go about winning the members, the union will have little inclination to paint in glowing colours promises that might seem unachievable. The humanization of work requires a thorough knowledge of the situation in which the modification is to occur. This, by definition, cannot come from the outside.

As organizations, unions can exert a certain control over their members and over the duties performed by the members of the bargaining unit. As Perlman expressed it, this control is the ultimate aim of unions. It is exerted essentially

through the omnipresence of seniority rules, and presupposes a certain job stability. Job enlargement or enrichment and the introduction of autonomous work groups therefore puts the traditional forms of union control in jeopardy, as R. Tchobabian explains:

> "No doubt the emphasis placed by the American trade unions on material demands partly accounts for their reservations in respect of the employers' experiments, which have sometimes been presented as a means of deflecting the workers from the prosecution of wage claims. But the chief reason for the American unions' opposition is that the experiments in question are frequently based on Herzberg's job enrichment theories, which they believe undermine an important factor in United States trade union strategy: seniority rules."

Not only does job restructuring run counter to traditional union strategy, but it is also likely to upset the promotion rules, to the disadvantage of the older workers.

In regard to the union organization itself, there are certain points concerning union leadership that may also be raised. It has often been mentioned that union leaders enjoy great security, since they are rarely defeated in a re-election. According to some, the positions they occupy guarantee them certain advantages over any other opponent. They can, for example, easily meet with their members or take advantage of publicity offered by the union newspaper. In other words, they apply the brass wage law of the oligarchy. This system does not, however, provide an absolute guarantee. Thus, it is becoming more and more common to see the recommendations of labour leaders concerning employer offers rejected by the unions. A leader, no matter how strong he may be, cannot lose interest in his members. His actions must conform as closely as possible to the desires of the majority of those who pay the dues.

In theory, worker support is acquired by the leader who has obtained the most benefits for the members, or whose promises remain the most enticing, while retaining a certain credibility. In practice, however, the procedure is not quite so rational, because although the union members may be aware of what they have obtained, they are less certain as to whether they might have obtained more. This uncertainty is just as great with respect to the benefits to be obtained in the future.

This whole process leaves the door wide open to subjective criteria on which union members can base their judgment. One of these criteria is based on the attitude of union leaders. A union leader who has always maintained a firm and aggressive attitude in confrontation with the employer will have no problem in justifying his behaviour. This union leader will never be accused of conniving with the employer or of plotting with the employer representatives against the members. If, on the one hand, the members obtain good benefits following negotiations, this union leader will be praised. If, on the other hand, they do not obtain all

the success that was hoped for, they may be led to believe that an even more agressive leadership is necessary. Never, in any of these cases, however, will they doubt the integrity of their leader. Conversely, a labour leader who undertakes to collaborate with management with the purpose of humanizing the work always risks being accused of having been "bought" by the employer. A person who aspires to a position in the union should therefore show himself to be aggressive with respect to the employer. Obviously, tangible gains such as salary increases will win this person a better credibility as to the performance of his duties, which will prove to be a valid argument for his election or re-election.

Obviously, these obstacles are not insurmountable. To assume the opposite would be to commit oneself to the perpetuation of the classic scenario and to reproduce the status quo of labour-management relations. It is possible to go beyond the classic pattern, often to end up with results that are to everyone's advantage. However, this having been said, it is important to understand the pressures that must be overcome.

NEW CHALLENGES FOR THE UNIONS!

These pressures and explanatory factors as well as all the others that could be thought of nonetheless do not lessen the challenge that is now facing the unions, or will most likely be facing them in a probably not too distant future. If, for example, there are economic restraints making economic demands necessary, there are also several symptoms of uneasiness in regard to the present organization of enterprises. The drop in productivity, wildcat strikes, the turnover rate, absenteeism and sabotage might, for example, be other indications of this. Here, enterprise does not mean just private enterprises but also includes state-owned companies and the whole public and quasi-public sectors in which bureaucracy and taylorism are often even more predominant than in the private sector.

Of course, the Labour Code stipulates that the aims of the union are the study, the protection, and the development of the economic, social, and educational interests of its members, and in particular, the negotiation and implementation of collective agreements. Such an article may prompt us to think of the extrinsic aspects of work ahead of the intrinsic aspects. However, it may well be asked, taking into consideration the evolution of society and the aspirations of the workers, perhaps in particular those of the new workers joining the union ranks, whether these same unions can afford to limit their activity to the defence of extrinsic factors and leave all the aspects which make a job humanly enriching in the hands of the employer.

These comments obviously appeal to the very concept of work and of unions. As to the notion of work, it is truly a difficult concept to define because it has varied with every era, culture and religion. In general, however, it is agreed that it is of economic importance. Because of his job, an individual can support

himself and obtain some of the material things that are likely to meet some of his needs. Work is also of social importance. The type of work a person does determines to a large extent that person's lifestyle in relation to society as a whole. His social status, friends, where he lives, are all elements related to his occupation. In a narrower sense, even the workplace itself has always been a place for social encounters.

In addition to these aspects, it is also generally agreed that work contributes to the fulfillment, self-development and self-esteem of the individual. It is often through his work that an individual acquires an awareness of having something to offer to society. Through his work, an individual to a large extent develops his personality.

However, the individual will only develop in his work if he has the opportunity to do so. Yet how many jobs and how many workplaces offer this opportunity today? It is not so much that jobs have changed, but rather that the knowledge, skills and expectations of the workers have increased, and that in return, jobs have not been modified sufficiently to meet worker aspirations.

Faced with these problems, will unions limit themselves to the economic aspects only, without delving into the very essence of work? From this point of view there is an increasing possibility that in the future, the gap will widen between what workplaces are and what the workers expect them to be.

On the one hand, we may well see the predominating influence of taylorism and bureaucracy: the division and simplification of closely supervised jobs, the subservience of man to the machine, and the belief that productivity can increase in direct proportion to technological change. Again, such a notion of work is found not only on the assembly line, but also in service industries and government bureaucracy. The very size of these enterprises increases this trend towards the simplification and standardization of jobs, because it promotes the development of control methods whose objective and outcome is the reduction of the freedom, autonomy and independence of the wage earners.

On the other hand, there is an education concept taking root which puts emphasis on the personal development of individuals. This concept is found both at home and at school. Yet these same students will, sooner or later, be subjected to bureaucratic restraints. Needless to say, frustration and alienation could easily set in.

This alienation could be divided into four major variations. The first concerns the helplessness of the individual faced with the organization. In this regard, lack of participation in company ownership, in the establishment of policies, or in administrative decision-making could all be sources of frustration and alienation.

The second variation is the absence of meaning in work. Taylorism and bureaucracy have very often made the worker seem like a tool or a part of a mechanical system geared according to the results to be repro-

duced. Perceived as an extension of the machine, the worker no longer sees the link between his work and the finished product.

The lack of integration of the individual into the working community is the third variation that may be distinguished. Lastly, depersonalization, or in other words, the individual's loss of contact with what he considers to be his fundamental nature could be mentioned as the fourth variation. Worker detachment from the task to be performed and lack of interest may both be indications of this alienation.

In this regard, making work less alienating and more enriching is not the responsibility of the employer and government alone. It is perhaps also the responsibility of the unions. In any case, the challenge is there. Must the unions restrict themselves to the extrinsic aspects, leaving the very essence of work to their opponent? To act in this way could be dangerous, because one of the aims of the unions is to give meaning to the real, everyday experience of the workers.

Obviously, in our concrete reality, these remarks may seem like wishful thinking, since, although it is easy to raise the problems, the same does not go for solving them. The obstacles are enormous. The unions are nonetheless duty-bound to meet these new challenges.

Just as they believed it would be useful to greatly exceed the limits of collective bargaining and enter the political arena because the results of collective agreement negotiations were unable to meet all of the workers' needs, unions should perhaps in the same way become involved in the new forms of work organization.

SOME PRINCIPLES CONCERNING EXPERIMENTS IN WORK INNOVATION

So far, there have been a few unions which have tried experiments in work innovation. In certain cases, it has been these groups of workers which have initiated them; in other cases, workers have just had to put up with them or sometimes even struggle through them. It is almost impossible to make a general evaluation of all these experiments, or to even determine the line of conduct adopted by the unions.

This is partly explained by the fact that the motives or the elements that gave rise to these experiments vary from one place to another. For example, an experiment resulting from a definite wish to save an enterprise is generally not received in the same way as a modification originating in an enterprise that is considered to be anti-union and is suspected of having hidden intentions. Furthermore, it should not be forgotten that every association of wage earners reflects, on the whole, the characteristics of its members. It is therefore normal for differences to exist between one place and another. Moreover, the union locals may also be influenced by, or they may wish to support the policies of the central labour bodies or the federations they are affiliated with. Just as these policies may vary, so too the union position adopted may differ from one local to another.

These reservations having been stated, it still appears that there are

several unions which more and more are tending to adopt certain principles in regards to experiments in innovation. The aim of these principles seems to be union protection in the form of a guarantee to the effect that the employees would not be manipulated. For example, the unions demand that all work innovation experiments obtain their consent. In other words, they do not want to be saddled with programs that they do not approve of. Furthermore, just as the employers take the necessary time and invest the necessary resources for implementation of a project, likewise the unions refuse to be rushed. They too want to have the time and be able to devote the necessary effort so as not to tag along behind the employer's initiative. Therefore, in order to have a certain control over the attempted experiments, unions often demand the signature of a letter of agreement stating that, like the employer, they also may put an end to the experiment at any time on condition of a certain advance notice. Finally, since the experiments have the purpose of improving working conditions, the unions demand that at least the acquired rights be respected.

CONCLUSION

Experiments in workplace innovation do cause some problems for the unions. In fact, this includes the whole problem of defining a new role, and all that involves in terms of internal tension, and the uncertainty that arises with respect to survival or attacks from outside. In spite of the problems created, however, it is doubtful that unions will be able to avoid this debate.

Labour unions are not simply a creation of the mind. They are practical organizations that were created in response to needs that were felt and experienced, such as job security, employer arbitrariness, or even, in the beginning, exploitation. Certainly many of these problems still exist. Needless to say, unions still have a watchdog role to play. However, whether it has been through social legislation, union gains, or simply through a change in employer attitudes, many of these needs have now been met. In other words, one of the issues the labour movement must now resolve is that of finding a way to meet the growing needs of worker alienation.

This is obviously an enormous challenge. By refusing to take this direction and to use their influence to put new work arrangements in place, unions are likely to displease their rank and file by only settling some of the problems of the day. New forms of work organization could, moreover, lead to a redefining of roles, with all that implies in terms of uncertainty.

Here, then, is a kind of challenge the unions are now facing and will have to face more often in future: how, without losing their acquired rights and without rejecting strategies that have been successful, will they be able to overcome the growing pressures involved in innovative work arrangements?

DIFFUSING QUALITY OF WORKING LIFE

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> "If a man write a better book, preach a better sermon, or make a better mouse-trap than his neighbour, tho' he build his house in the woods, the world will make a beaten path to his door".

This, the best known quotation from Emerson, which of course is nowhere to be found in his writings, is notable on two counts: first, that only the bit about the mousetrap is remembered and, second, that it is just plain wrong as every marketing man knows and is at pains to convince the rest of us.

So, instead of waiting for the world to beat a path to our doors, we are obliged to put our show on the road, to diffuse whatever is needed to improve the quality of working life.

1. WHAT IS TO BE DIFFUSED?

The first question to be answered is, "What is it that is to be diffused?". I apologize for beginning my answer with a negative: What is to be diffused is NOT a package. Packaging sells, no doubt, but there is no tidy collection of practices or programmes, no nostrums or patent prescriptions which can be bought off the shelf. What is, and has to be, diffused is:

- values, not outcomes
- concepts and ideas, not practices, methods, nor solutions
- aid in deciding where you want to go and how to set about getting there.

The very first principle of sociotechnical design is the principle of compatibility: the process of design must be compatible with its objectives, a participative organization implies participation in the process of creating it. The design must belong to the people who are going to operate it, they must work it out. Such a design cannot be bought off the peg. There is a very widespread and influential misunderstanding that identifies QWL with autonomous work groups or with 'teams'. It would be nice if it were all so simple. After all, setting up 'teams' is not teribly difficult. All it requires is 'team building' and we can hire experts for that. It is true that sociotechnical designs often result in the introduction of group working in some parts of the organization, but the group working emerges from

the needs of a complex task which requires the coordination of many activities, not from an *a priori* assumption that teamwork makes people happy.

Before we discuss the processes and strategies of diffusion, we should take stock of the values, concepts and methods we want to spread. The values are essentially humanist values: that the organization exists to bring benefits to people and that benefits to some should not be won at the expense of others. More specifically, that the development and utilization of the skills and social skills of work people should be an organizational objective. Underlying these values are assumptions about the nature of man, that given the opportunity, he is adaptive, inventive, and co-operative.

The concepts are essentially those that come from viewing organizations as 'open sociotechnical systems', arrangements for getting work done under widely variable conditions by means of a technical system selected so as to impose demands on the people, the social system, which the latter can be so devised as to meet without undue strain (....)

The methods are essentially those of action research, putting a great deal of emphasis on shared ownership of the processes of data gathering, analysis and design.

Thus, the strategies for diffusion must be those appropriate to spreading values, ideas and methods, Emerson's sermons and books rather than his mousetrap.

2. WHERE IS DIFFUSION TO TAKE PLACE?

When we speak of diffusion, we are using the same term to cover a range of processes. Our strategy will not be appropriate to them all. For the values, ideas and methods to spread, connections have to be made at a number of levels.

We are concerned with diffusion:

- from one section or department to another within the same organization
- from one unit or plant to another within the same company, firm, institution
- from one firm to another within the same industry or sector
- from one source of influence or facilitation to another.

These can all be described as diffusion *horizontally*.

But we are also concerned with diffusion *vertically* upwards:

- from section to unit
- from unit to company, corporation
- from company to sector
- from sector to polity

and downwards.

So we need a whole range of strategies and an infrastructure for generating them.

3. STRATEGIES FOR DIFFUSION

In the long run, the diffusion of values is, without doubt, the most important objective, but given the way our society works, there is unlikely to be a long run, even when, like Keynes, we are all dead, unless we have some very visible demonstrations of their superiority and practicality. It is, therefore, appropriate to begin with the sharp end.

3.1 DIFFUSION WITHIN A CORPORATION

The first comment I wish to make is that it is far too late to start thinking about diffusion when you have a successful example on your hands. Let us suppose that you selected a department in your organization, conducted a protected or sheltered 'experiment' and now have a redesigned department operating successfully. You now wish to take off the wraps, expose it to view and to get other departments to follow suit. Surprisingly, nobody seems to want to be number two. Number one was 'special'. It was given special and favoured treatment. All the reasons which led to its selection as number one are reasons why it would work there but nowhere else. And so on. Nor is there much glory in being number two. If you succeed, you have done no more than follow where number one led. If you fail, you can't even copy successfully. Among the devices for encapsulating the demonstration site are the denial that it really was successful, prediction of its imminent collapse, rumours that it has already collapsed, claims that it is placing undue burdens on other less favoured departments, and so on. The chances are that this last claim may have some justice.

The re-organization of a single department totally within its own boundaries is a rare event. Some renegotiation of its inputs from, and outputs to, other departments is to be expected. Even though the outcome of renegotiation is likely to be mutually advantageous, the assimilation of change imposes a burden, albeit a temporary one.

So how can we avoid the number one problem? The answer was given seventy years ago by Francis Cornford: "...nothing should ever be done for the first time". But if we have no number one, how can we get started? By having two, or preferably, three number ones. And by building in our strategy for diffusion from the outset. How can this be done? Obviously, this must depend to a great deal on circumstances and the actual procedure will vary. Most projects and programmes are managed by two levels of active committees — a steering committee responsible for providing the necessary degree of sanction, and a task force for each site. By including on these committees those who will be involved in later projects, ownership of the projects is shared and those next in line given experience in the processes involved. I said that the way this is done must depend on circumstances; task forces should not be too big or dominated by managers, the extent of union involvement will vary and may be made contingent upon further negotiation between the completion of the first projects and the initiation of a second wave. And so

on. But if the details must remain to be worked out, the broad outline of strategy is clear enough.

Diffusion must be thoroughly considered by the steering committee from the outset. It is tempting to reach an easy agreement to a limited sanction — we argue to a limited trial in a couple of departments or sections and then we'll take stock and decide whether to go on and, if so, where. Such limited commitment not only signals to the sections concerned that they can expect no support if the going gets rough; it also ensures that no follow-up will be ready, and that those reluctant to adventure will be able to plead that the dust be allowed to settle before further upheaval is initiated. This enhances the probability that the first trial sites will remain 'encapsulated', interesting specimens whose continued viability depends upon special protection and whose success can be explained as due to special circumstances. The steering committee must grasp this nettle at the beginning, have follow-up ready and bring in at the start those who will be crucially involved in it.

The strategy I have been discussing is that concerned with diffusion from department to department or from plant to plant within the same firm. I have therefore been able to discuss it in terms of the actions that can be taken within the firm. Wider diffusion of QWL involves many other actors.

3.2 HORIZONTAL DIFFUSION (intra-sectoral)

Firms within an industry are aware of the advantages that accrue from tempering competition with co-operation. Jealously guarding what gives them a potential advantage over competitors, they readily share with them in activities which promote the interests of the industry as a whole, or in mutually advantageous investment whose expense is beyond the resources of a single firm. Trade associations of various kinds provide the cooperative facilities required. Their potential involvement in the spread of QWL depends on a) the extent to which firms perceive QWL as conferring competitive advantage, and b) the extent to which firms in the same industry face a similar social environment. On the whole, I believe that most firms are ambivalent on the question of competitive advantage. On the one hand, they are not insensitive to the potential benefits to their public relations and to the efficiency and stability of their work force; on the other hand, they are aware that there are risks in being too different and that the long-run viability of new ways of working is bound up with their wide acceptance. It is here that the question arises of the social environment. Ways of working in a hosiery factory in Heretown may be more affected by what goes on in a Heretown food cannery than by events in a hosiery factory in Farville. Much turns on the way the unions work. If they are strongly local in their orientation, they may create a social environment which all local firms share; if they are strongly sectoral, they create a sectoral social environment. The more closely linked firms are in other ways, the closer is likely to be their shared concern with QWL. Trade associations which are already active in matters concern-

ing personnel and industrial relations are very likely to be focal in diffusing QWL. Those of us who are concerned generally with facilitating the spread of QWL concepts and methods should explore what can be done to help equip such trade associations with a QWL capability.

I shall return to this issue when I come to consider in more detail the role of governments in the diffusion of QWL.

3.3 VERTICAL DIFFUSION — the Jamestown Model

My 'Heretown' scenario supposed a community with a fairly strong sense of identity, typical of the small or moderately sized but long-established industrial town. Jamestown, N.Y. provides a well-known example; one where the cohesiveness of the work force and the power of the unions acted as a potential deterrent to firms seeking new sites for their operations. The Jamestown strategy links community organizations, unions and employers in a single diffusion network facilitating and linking QWL developments in firms of many different kinds.

Vertical diffusion is potentially more powerful than horizontal where the prerequirements are met. The old, industrial town is not the only case; newly industrializing areas have similar potential and have less established practices to be changed, fewer entrenched positions to be outflanked. It is, however, hard to see a vertical strategy proving effective in, say, one of the industrial parks of a sprawling metropolis.

One of the strengths of the vertical strategy is the potential link with educational and other relevant institutions. Fundamental change in the ways of working in industry and in organizations generally entrain and imply wider changes, not least in education. Our educational systems have evolved largely to serve industry, to provide people with the skills and discipline required for organized work. New ways of working place greater emphasis on the capacity to acquire a wide range of skills and on the social skills required for cooperative action. If these are to be encouraged, they need to be valued and rewarded. We may note that the members of the Oslo Work Research Unit who have been most prominent in advancing the well-known Norwegian developments in QWL have progressively turned their attention to the schools and educational institutions. The experimental phases of the Norwegian shipping project have proved very successful; further diffusion depends on appropriate changes in the education and training of seamen to which efforts have now been directed.

4. QWL IN CONTEXT

The same changes in social patterns and social values which underlie and support the developments in QWL are to be seen at work in other guises. Regulations restricting pollution, or enforcing redundancy payments, or requiring equality of opportunity for women with men, or imposing procedures for appeal against disciplinary action, or extracting contribution towards training costs are all facets of governmental action revising the

basis of accommodation between organization and community. In economists' language, costs which were formerly 'externalities' for organizations and borne by the community are now borne by the organization. The new basis of accommodation does not yet require organizations to reckon among their outputs the quality of the working life of their employees, nor their social skills of participation and decision making as a community resource to which organizations would have a responsibility to contribute. But the acceptance of hitherto unrecognized obligations upon organizations to their members is a part both of the new regulations and of QWL.

Nor can QWL be unrelated to other non-regulatory developments which renegotiate the basis of the relationship of the worker to his employment. Flexible working hours, job sharing, family- or community-coverage of jobs are all examples of these new developments (or rediscoveries of older work patterns). There is always a danger that different manifestations of the same underlying movement may, through developing their own territories and rigidities, handicap and oppose one another. It is easy for each to perceive the others as irrelevant or, worse, as distracting. An important aspect of the diffusion of QWL must be to keep in concert with, and avoid opposition to or from, these other developments, to recognize the sources from which it draws its initiatives and its strength, and to acknowledge other movements which draw from the same source.

In common with other desirable developments, the spread of QWL is hindered by conventions of measurement and evaluation which have not shifted to match the emerging basis of accommodation between organization and community. Our accounting practices are a long way from measuring all the benefits which an organization provides to, and all the costs which it imposes upon, the community. Until they do, it may appear uneconomic, even prohibitively so, to utilize resources, especially human resources, in the most beneficial way. A long-term strategy for the diffusion of QWL which does not direct itself towards changing the basis upon which the performance of organizations is assessed and rewarded is the strategy of the dung beetle; one unguarded moment in the struggle to push its load uphill threatens to engulf it in what we are all too accustomed to have thrown at us from the side.

Of course, political allies can be an embarrassment. QWL must not become associated exclusively with one political movement or with one congerie of pressure groups. Internationally, thus far, associations like the International Council for the Quality of Working Life have remained free from entanglements. Nationally, those concerned to advance QWL are bound to be concerned with the issues surrounding 'worker participation', 'industrial democracy', 'humanization of the workplace', 'the fifth directive', 'mitbestimmung', and so on. It is vitally important that unions in particular should not perceive QWL as a distraction from or a competitor to their ambitions to enhance their power. Nor should QWL be seen as an impediment to collective bargaining.

But if this means, as I think it does, that the success of QWL rests upon the unions being able to take a positive view of it, there are obvious strategic implications. Unions will not enter into any arena with management or with government without feeling adequately prepared. To feel adequately prepared, they need to be able to examine, discuss, argue, and resolve issues among themselves. This they will not do in open forum. Before encountering the other participants or protagonists, they will want to develop their own competence. They may need to develop their own professional support — or at least feel able to call upon their own professional advisers. Hitherto, those industrial relations experts whom unions trust and feel able to consult have tended to be wary of, if not hostile to, QWL. They need to be convinced that QWL will not weaken the power of the unions nor undermine collective bargaining. A strategy of diffusion must open a channel to these 'gatekeepers'.

The gatekeepers of industrial relations expertise are not the only network to which an open channel is needed. I indicated above that our present systems of accounting constitute a hindrance. I might have added that our present understanding of the relationship between technology and society constitutes another. If organizational performance is measured by accountants, organizational design is the province of engineers. New accounting systems will be designed and developed by accountants, not by behavioural scientists; new organizational designs will be produced and implemented by engineers. A strategy for diffusion must be one which develops networks of relevant professionals; the concepts of QWL must find their way into their training.

5. ROLES OF GOVERNMENTS

Government has four distinct but related functions with respect to QWL. First, it is a very large employer: about one employee in four in Canada works for one or other level of government.

Secondly, government plays a facilitating role in helping other organizations to improve QWL.

Thirdly, government exercises a regulatory function, setting and policing the rules, the terms on which organizations and individuals relate to one another.

Fourthly, it has an arbitrative function, attempting to resolve differences among, and keep in balance the claims of, contending groups: employers, unions, consumers; and protect the 'public interest'.

Its credibility in the other three roles is dependent upon its performance in the first. Great attention will be paid to how it manages its own QWL 'experiments'. In the case of the Federal Government, the degree of its impact on Provincial and Local Governments will be an important indicator of its grasp of the principles of diffusion. Here its role could well be that described by Schon as to "set out to help peripheral systems transform themselves and to connect them with each other".

Its third and fourth functions imply that those arms of government

which are concerned with regulation and arbitration should not pursue aims which are divergent from those which inspire the people responsible for the first two. A good deal of internal discussion and mutual education inside the government machine is an essential part of the strategy.

But government has one further role which falls to it by default. A strategy of diffusion must have a supply as well as a demand side. All the strategic paths we have explored involve increasing people's understanding of, and demand for, QWL. The more successful the strategy, the more the demand, the more will be the need for people to help organizations with their QWL programmes. Where are these people to come from? Demand no doubt stimulates supply. If scores of organizations in Canada start to yell for qualified help, a training bandwagon will start to roll. But expert facilitators are not trained overnight, experienced trainers take much longer to develop. Without the proper help, attempts are likely to misfire or to take unfortunate shapes. And we cannot afford too many early failures. A responsible strategy must look to the supply side and seek to support those who responsibly try to provide it.

Paper prepared for the National Conference for QWL Facilitators (Western Conference), Vancouver, May, 1978.

QUALITY OF WORK LIFE: A CLEAR AND PRESENT DANGER

by Ted Mills
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1. THE EXPLOSION OF AWARENESS

An intriguing aspect of this article is that it neither could nor would have been written prior to 1980. Its subject matter is, curiously, uniquely concerned with the art of industrial management in and for the 1980s. I shall seek to identify a mushrooming trend in the conduct of business affairs in the U.S. which the tell-tale events listed below are merely indicators. Leaders of private American industry, unions and the business and labor press seem to be taking a quantum leap into a sudden new made-in-U.S.A. preoccupation with the effective management of American people at work in the decade ahead. The resultant portents of this phenomenon — particularly in their impact on revitalizing lagging U.S. productivity, industrial strength and world leadership — are many. And they are growing, with increasingly clear signs of assistance in their goals by a new administration in Washington.

A few of the more visible initial events in this perhaps historical new management thrust in the United States for the 1980s were:

• In November 1979, Mr. William Batten, Chairman of the Board of the New York Stock Exchange delivered a major lecture at the Wharton School. In it he exhorted American industry to immediately become more actively concerned about seriously lagging U.S. productivity growth, and particularly to devote greater attention to exploring the potential in the new social technology of "quality of work life" (QWL), which he identified as a necessary component to mandatory productivity resurgence.

• In March, 1980, Mr. Charles L. Brown, the Chairman of the Board of American Telephone and Telegraph (AT&T) issued a letter to the presidents of the 26 operating companies of the 1 000 000 employee Bell System, exhorting them to move their company toward what he called the QWL "management style", with his strong endorsement and urging. (This later was reprinted in the June issue of the Bell Telephone Magazine, whose cover story was "QWL on the Bell System Drawing Board.")

• In April, 1980, Mr. James F. McDonald, then Executive Vice-President of General Motors and now (significantly) GM's President,

convened the 350-odd senior officers of his entire company and, for the first time, several officers and leaders of the United Automobile Workers union, to join in a full day's intense examination of the company's and union's philosophies and progress in GM's seven-year-old QWL program, and how to enhance its growth in the company.

• In April 1980, the Houston-based American Productivity Center assembled some 300 major American industry, labor, government and academic leaders in a conference in Houston, where a clear consensus emerged that a) government incentives for capital formation, b) technical innovation and c) improved people management (or QWL) were critical *and inseparable* imperatives to regenerate U.S. productivity to combat domestic stagflation and international economic competition.

• In mid-April, 1980, the Big Ten steelmakers of the United States signed a new three-year contract with the United Steelworkers of America, Appendix H of which explicitly identified the desirability of joint labor-management "participation committees," or problem-solving bodies (called QWL at GM and AT&T) in all plants and departments, to generate innovation and operational improvement in the ailing steel industry.

• In July 1980, *Business Week* devoted an entire issue to the "Reindustrialization of America," in which new people-management issues were stressed, and in the same month NBC-TV presented a 90-minute "White Paper" broadcast called, "If Japan Can, Why Can't We", focussing on comparative people management factors as a key ingredient in Japanese industrial ascendency. A September cover story in *Newsweek* was entitled "The Productivity Crisis: Can America Renew its Economic Progress?" These were accompanied in 1980 by a growing flood of comparably concerned articles in *Fortune*, the *Wall Street Journal*, *Forbes*, the *Atlantic Montly*, et al.

• In June 1980, in a widely-publicized agreement, both the Communications Workers of America and the Telecommunications International Union signed with giant AT&T separate collective bargaining agreements — one (CWA) calling for immediate establishment of a Joint Working Conditions and Service Quality Committee and the other (TIU) calling for a National Committee to improve Quality of Work Life. Language in both stressed encouraging greater employee participation to the end of greater service quality in U.S. telecommunications.

• In October 1980, the Ford Motor Company and the United Automobile Workers formally announced a long-developing, joint co-sponsored venture called Employee Involvement (EI), and issued a startling *EI Handbook* outlining procedures for joint union-management EI implementation in the company.

The handful of significant events in the U.S. industrial scene in the year 1980 is impressive in itself. But they are only the tips of a few larger icebergs. Behind them, in the same year, were hundreds — some claim thousands — of other public and

private sector work organizations and unions (regional and local) who in approximately the same time period internally announced policies or active implementation moving in the same "participative" people-development directions. To cynics suspecting such activities and policies were just another U.S. fad, like the Human Relations movement in the 1960's, the sheer weight of numbers of U.S. organizations examining and implementing these new philosophies of management seemed contradictory.

One notable characteristic of all the pronouncements, policy statements, actions and reportage cited above is the timing. They occurred at the end of the 1970's, precisely at the moment when for the first time in our national history, Americans were beginning to suspect that something vital in the long-vaunted American way of working seemed to have gone wrong. The rash of "reindustrialization", "revitalization", "productivity crisis" thrusts in our national press exemplified this awareness. The prevailing national mood was given many descriptors: anxiety, malaise, alarm, eclipse, decline — summed up by President Reagan in his first "fireside chat". Buffeted by coexisting economic stagnation and inflation (or "stagflation"), by a national deficit approaching crisis dimensions, by increased public alarm and awareness of our growing loss of international economic dominance evidenced in our balance of payments deficits, by our shrinking and still-weakening dollar, by nation-wide shrinkage (through inflation) of municipal and government funds to pay police, teachers, garbage collectors, and community or state services for the poor and aged, a pervasive sense of dismay and loss and nameless alienation has become a fact of American life as we entered the 1980's. There was more than coincidence in the timing of the events cited above. There was resolve to cope, emanating from the White House, but equally from thousands of private sector boardrooms.

Another striking characteristic in that list of pronouncements and events is their close kinship to still another cause for American economic concern and alarm: the precipitous decline since 1973 of the growth-rate of American productivity. In mid-1980 the U.S. Department of Labor was forecasting that decline as -4% for 1980 alone. Students of American productivity growth or decline and its causes, both in macro national dimensions and micro (individual company) dimensions, point to many key factors currently affecting American productivity enfeeblement. They point to the timidity of risk capital formation in the U.S. since 1973, and the resultant ever-increasing age and fatigue of much American plant. They point to the waning rate of corporate funds applied to technological research and development, particularly in the declining manufacturing sector of our economy. They point to the ever-rising cost of energy as a manufacturing cost, and the reluctant drain on capital and R&D resources simply to find less energy-consuming ways to produce our goods and services. They point to the bewildering, inhibiting, debilitating maze of government regulatory agencies and their

demands on the conduct of business affairs. They point to the ever-rising costs of human and technological labor, both spurred by an inflation that shows no signs of tapering off. As the experts point out, *each* of these components, or subsets, of the American productivity puzzle are very real problems in themselves; each, in its right, needs vigorous attention and remedial action at both macro and micro levels.

It would be logical to assume that the sudden new American preoccupation with people-based concerns derives partially, if not wholly, from our growing awareness of the seriousness of our productivity decline. QWL is, in fact, another subset of the productivity puzzle — a social technology devised to cope with human productivity at every level of organizations.

There are those, including this writer, who consider the people-development component of revitalizing our productivity growth as possibly the most important component, after turning our productivity decline around, in the decade ahead. To reverse the downward trends in the formation of risk capital, in R&D, in coping with costly energy, in working with instead of against government as is being done abroad, in coping with rising labor and technology costs, human ingenuity is required; some have even argued that productivity itself is nothing more than innovative human ingenuity and invention. So an extremely notable characteristic of the list above is its focussing on new people approaches as a useful remedial aid to revitalizing our larger macro and micro productivity concerns.

A third remarkable aspect of the turning-to-people concerns listed above is the recurrent emphasis on, or the use of, the term "quality of work life", or QWL, in the announcements. QWL is used by most as a descriptor term to identify a growing American emphasis on greater employee involvement in, influence over, and participation in workaday decisions affecting the nature of their life at work. Since World War II (and before) in Europe, socio-economic themes like "worker participation", "industrial democracy", and the like have been prevalent; throughout the 1970s, such notions were key planks in the ideological platforms of Social Democratic parties in almost every European nation. Since the mid-1950s in Japan, worker involvement, particularly in quality control practices, has been a part of the industrial ethic. Until now, such concerns have not been true in the U.S. Somehow, until the sudden 1979-1980 spurt of interest here, such concerns have not been voiced even by our most militant unions, and have been generally viewed by all but a handful of farsighted managers and union leaders as even dangerous, or at least irrelevant to the conduct of sound American management.

One might be led to believe that the American change in view about such people matters is in the process of profoundly changing. It would seem, just in reading such phrases as "cooperative participation", "self-respect and fulfillment" in the CWA-AT&T agreement alone, that we are perhaps turning a

corner in people management philosophies in the U.S. — and in just a few short months. Particularly in viewing the explosive proliferation of a Japanese worker-involvement structure called "Quality Control (QC) Circles" by the thousands across the face of U.S. industry in 1979 and 1980, it would seem reasonable to believe that American managers and union leaders, possibly stimulated to action by the search for ways to "revitalize" our ways, have perceived how little we have utilized the latent talents of our people in work organizations — how largely untapped has been our most valuable resource: our people.

One could assume, from the indicators cited, that we have come to a watershed in some basic American management philosophies. Many of us, for almost a decade, have urged exactly the kind of serious reexamination of our ways of working which is now taking place with such momentum. We have observed and documented the profound value-shift in U.S. society, and warned that our work institutions must adapt themselves to cope with the greatly-changed new values and expectations of managers and workers alike now prevalent across the land. As Yale's Rosabeth Kanter has suggested, it is not the worker but the work which must evolve and change. For a decade, many business organizations have been actively experimenting with new, more contemporary work structures and relationships involving employees in decision-making; the overpublicized QC circle is but one. We have seen, demonstrated, chronicled the impact of such new ways of working on bottom-line performance and productivity, and have urged unions and managements, separately and together, to realize the total revitalization potential possible in the kind of "cooperative participation" now beginning to be picked up as a "new" thrust across the country.

One would think we would, at long last, feel gratified that what we have for so long advocated is now being perceived by ever-greater numbers of managers and unions. But we are not. Rather, we are uneasy.

As we witness company after company, and union after union, announce its new programs, often using the "QWL" label, we are beginning to see alarmingly consistent signs of superficiality in what is being said, urged, and — particularly — done. In an industrial society noted for development of synthetic copies of the real thing, we see more nearly synthetic, cosmetic toying with new ways of working. We see a few highly publicized symbolic patches — or band-aids — appliqued over unchanged management styles and unchanged, short-term, business-as-usual objectives. We see the dangerous American "quick-fix" mentality applied to people matters which require long, slow, careful therapy computed in years, not months. We see a prevalence of what one corporate president characterized as the short-term "I don't want it good, I want it Thursday" syndrome in American business practice. But wide awareness that for permanent results *organic* change is requisite — planned change in management philosophies and styles, basic value and structural changes in ways of working, changes in the very

relationship between the manager and the managed — seems largely missing.

With a few significant exceptions such as those noted above, or in the relatively few organizations like General Motors, the Dana Corporation, and Polaroid, where QWL (or its equivalent) has been an evolving way of life for almost a decade, the 1979-1980 phenomenon of concern for quality of work life may turn out to be little more than a passing, and disrupting fad, capable of doing more serious and lasting harm than good. Too many of those entering into new kinds of people management are doing so lightly, cosmetically, in a quick rush to packaged panaceas, or mere tactics. Too few perceive — as they must — that what they're doing must stem from a basic strategy for profound reconception of the very nature of management. Those who overlook the necessity for strategic planning across a decade are inviting potential catastrophe, to their organization and all the people in them. And that is exactly what seems to be occurring. One company president recently told his subordinates he wants five hundred QC circles by year's end — as if so doing somehow solved his people problems for the 1980s, as if the strategic planning and enabling climate and professional direction necessary to make such activities generically feasible were somehow unimportant, unnecessary, irrelevant.

What seems to be happening in such a rush may not really be happening at all. If this is true, and I submit that there is a clear and present danger that it is true, then the enormous regenerative, revitalizing impact of what could be will not occur. And not only all Americans, but the industrialized world will be the heavy losers.

2. AN ERA OF PASSAGE

One overarching certainty affecting all components of the productivity scene, but particularly the people part, is that both as a society and economic force in this queasy planet of ours, the industrialized world — with Americans potentially at the forefront — has already entered a whole new socio-economic ball game. Its rules are literally being devised as we play in it. Its new structures — from new nation states to new monetary systems to new international diplomacy — are being invented as we play. There is overwhelming social, political, and economic evidence that the underlying structures, values or goals of what some call the old "industrial age" (to which many of us still cling as if they still made sense) are dying or already passed away. There's equally unambiguous evidence of our passage into a new era, which futurist Alvin Toffler has called "The Third Wave", Peter Drucker has labelled "The Age of Discontinuity", William Ellinghaus of AT&T has aptly called "The Information Era", and others have described as "The Age of Rising Entitlements", or simply (and quite incorrectly) "The Post-Industrial Age". Whatever we call it, we have already passed far into it. We have begun to adopt its new values and lifestyles and structures, with the computer and the new narcissism as perhaps its dominant manifests. Whether we use Proposition 13 or the micro-

processor revolution or the new participative QWL structures as tangible evidence of its shape and intrinsic direction, it's well upon us. Like it or not, understand its turbulence and new dynamics or not, we are in it.

As we move ever farther into its turbulence, none of us should permit ourselves to forget that most of the work organizations in which we Americans still work were created in and for old, industrial age values. Structural anachronism, like an inhibiting, invisible barrier to productivity and operational effectiveness, infests some of our most prominent work organizations with the debilitating weariness and weaknesses of age, for all the apparent modernity slick EDP systems seem to provide to maintain horse-and-buggy structural notions. Like the New York subway at rush hour, we are trying to squeeze and push evolved, educated, demanding, different "new breed" people, with different notions, aspirations, sense of self and — most important — views about work and working, into rigid, old work organizations whose structures and basic work rules were largely created more for Carnegie's day than ours. Ominously, and even more important, a majority of our contemporary business and management organizations and especially the creaky, bureaucratic way we tend to try to run them seem increasingly irrelevant to the real, turned loose capacities of the new breed people — managers and workers alike — who comprise them. By the millions, evolved and educated Americans are turning off and away. Their aspirations don't match. They belong to and comprise the new era. Their organizations — most of them — conspicuously don't.

Glaringly absent in the way a majority of American business organizations are organized and run today (and strikingly present in the way most Japanese organizations are run today) is an ability by management policy-makers to get in step with the evolved nature of today's contemporary working American in their employ.

A value-jump is missing: the belief, or faith, that if given a show, most working people in the 1980s are not (as Taylor postulated of the worker of the turn of the century) *inherently* dumb, or loutish, or irresponsible, or glazed with natural apathy and greed. A bad system, true, can (and does) make them behave as if they were. Social scientist Chris Argyris has suggested that if one treats employees like children, one can naturally expect childish behavior. The reverse seems equally plausible: if one considers one's employees as adults, one can anticipate responsibly adult behaviors. A surprising amount of the people-operating structures and systems built into the way we operate our business and government organizations were based upon old Army-like command and control values, to establish tight and measurable controls over employees, consciously or unconsciously suspected of being less than willing to deliver reasonably adult capacity and performance. In his memorandum to his officers, AT&T Chairman Brown suggested a change in "management style". It was this simple value-leap from suspicion to trust he was perhaps identifying in that change.

It is that value-leap which dominates what is happening at General Motors. It is that value-leap which is at the core of what is called quality of work life — which postulates that most people who work want to do more, and do it better, if given the chance.

3. THE QWL APPROACH

Far more urgently than when physicist Robert Oppenheimer said so some twenty-five years ago, "The world alters as we walk on it." Those of us active, or seeking to be active, in finding better ways for Americans to work and produce in a critical time of our history, and to build a better American social and economic future, in the explicit demanding terms of that future, must learn to face the ever-more ambiguous and changed dimensions of the new information-age playing field out there. We must learn to cope with the newness and initially-uncomfortable strangeness of its feel. We must do so as wisely as possible. More than most of us care to admit, there is real urgency in the need for Americans to invent 1980-style ways and structures and skills for operating our work organizations and in managing the people who comprise them with greater, more adult ingenuity to achieve lower costs and higher quality of output and greater profits. We as a nation, or as individual organizations in that nation, literally cannot afford the foolish band-aid-now-pay-later approach so dangerously prevalent. As one political party or the other likes to say, "it's time for a change." But the change in our "system" must be organic, value-based, deep-seated, wisely slow, and profoundly therapeutic. Most important to pragmatic Americans, it must deliver results — for the long haul of the American future.

What is herein called "quality of work life" or "QWL", which is at once a win-win approach to new ways of working, an operating philosophy, and an operational technology for creating more effective organizations, is — as this writer has elsewhere pointed out — a bummer of a term. Already, throughout U.S. industry, QWL or its equivalent social technology operates under a dozen or more different aliases. What GM and AT&T call QWL, Ford calls "employee involvement", Westinghouse calls "productivity of people" and many organizations practicing it widely like Polaroid and IBM and Procter & Gamble use no name whatsoever, not even "it".

There are dozens of misconceptions about what QWL is, or what is seeks to accomplish. One of the most prevalent errors is that, as its name erroneously suggests, it is a soft, touchy-feely way to make workers happier in their jobs. Another, often discoverable among managers deeply involved in its development, is that its precepts and structures apply only to working conditions involving hourly workers, and/or to union-management relations. The fact that QWL not only does importantly apply and has applied in management-only settings as well as on the shop floor often eludes many of its most ardent management advocates, who often say QWL is excellent for "them", but not for "us". This is a major conceptual error. Still another widely-held misconception is that "productivity" and QWL are quite separate

concerns. While this *should* be true in the manner in which QWL is initiated, any operating manager of a QWL-structured segment of an enterprise will proudly show off his often startling bottom-line improvements in both quality and profitability.

One final common misconception about the QWL approach found particularly in supervisory and lower-middle-management levels used to "living by the book" of bureaucratic rules and regulations, is that it's somehow a dangerously permissive kind of affair, destructive of organizational order and controls, and thereby somehow threatening to management's inherent right to manage. As we will see, this also is neither true nor necessary; it is more nearly a very common fear of loss of policy authority or power by supervisors, who QWL suggests should become resources to their subordinates instead of mere cops.

I suggest once the suspicions and misconceptions are cleared away like cobwebs, it's easiest to look at QWL simply as an umbrella-like cluster, or family of connected notions about better interpersonal and organizational ways of working in contemporary America in any kind of workplace and any kind of work. As a descriptor it's easiest to view QWL as being as ambiguous as the swiftly changing realities of the contemporary social behaviors it seeks to cope with, as evolutionary as the emerging information age it seeks to move forward with, and as potential with impressive economic impact as a world which indeed alters as we walk on it. Even more simply, I suggest that QWL be perceived as no more and no less than an increasingly feasible social technology, the term used by Batten. If organically and wisely instituted as just this, it can slowly open up to lagging productivity of our work organizations into productive dynamism again, simply by responding structurally to the new aspirations, capacities and values of the working men and women who comprise today's work organizations — the people who will manage and perform our work in America in the 1980s.

To this writer, QWL is a descriptor term of an evolving new and uniquely American social technology in work organizations. It still — in 1980 — applies more to what can be and should be and will be than what is; to paraphrase Oppenheimer, it alters as we work on it. As a social technology, although it has penetrated profoundly into many organizations by 1980 (General Motors in 1980 has over 100 QWL structures in operation), it is only at the beginning of the beginning of its potential impact. By 1980, the term has become widely enough understood to be a working philosophy more and more labor unions will accept as valid to their goals, and most managements can accept as a sound, realistic business objective, particularly in recessionary times.

Specifically, what *is* this social technology? How does it seek to do this? It's startlingly simple, if viewed as a total approach. In fact, it can be reduced down to two very simple characteristics present in all effective QWL efforts. Each — and both — underlie the far more complex cluster of strategic and

tactical implementive outcomes explored below.

First, as we've already noted, QWL is value-based. Driving all effective QWL efforts today and tomorrow must be awareness and acceptance — by all levels of management, by union officers and leaders, by employees — that the organization has begun a process of respecting what its people need and want and given a chance, can do today — in 1980 — when working. One of the notable characteristics as a beginning step in almost all QWL initiation activities has been development by managers, and often management and unions jointly, of a driving set of QWL-based principles or philosophy or values which motivate and underlie all subsequent implementive activities of the process. Many organizations, in defining such guiding principles, use terms like a new "management style" or "treating employees as adults" or "greater employee influence in decision-making" or a new stated organizational faith in "human dignity" and the importance of "mutual trust". However, these QWL principles are defined by each organization, or parts of organizations like a given plant or division, they usually are seminal to all that follows.

Second, QWL is process-based. For the word "process" one could substitute such words as "open", "evolutionary" or "dynamic". Process-based structures are the reverse of rigid, static, unchangeable structures frozen in concrete. They imply the exact opposite of the term "bureaucratic". They thrive on creativity, innovation, group problem-solving. They move, and grow. So in organizations opting to pursue the QWL technology, driving more and more of the organizational decisions making progress in an evolutionary way will be joint problem-solving teams ideally, over time, established at *every* level of the organization, using group process skills (in which the participants have been specially trained) to pragmatically identify, innovate and solve *operational* problems and opportunities, whether they be people problems, technological problems, work-process problems, environmental problems, or whatever joint problem-solving bodies collectively might see as impeding more effective and productive day-to-day operations. You may have noted I underscored the term "operational". For as will be explored more fully below, operations is where QWL lives in organizations — in the operational or "line" offices and shopfloor workplaces where U.S. goods and services are produced.

One of the least understood yet most important qualities of process-based activities and the problem-solving structures formed to enable their work in QWL organizations is that they accomplish two critically important things at once, or what one manager has described as a "double whammy".

First, by their very existence, they provide important openings to tap and unleash latent creative expertise resident in the workforce and management. Second, and equally importantly, by so doing, they provide valuable human rewards to their participants. They provide employee "participation" in decision-forming, one of the key

value bases of the whole QWL concept.

Value-based. Process-based. Problem-solving. Without being innaccurate, one could identify the totality of the QWL social technology in eighteen words: a cost-effective, value-based, process-based, problem-solving technology for making work organizations more contemporary, productive and effective. If you wanted to round it out to an even 20 words in private-sector businesses, you could add "and profitable."

Now let's see if we can make that short definition stick.

4. THE EMERGENCE OF INSIGHT

The traditional approach in the considerable academic contribution to development of the QWL social technology across its early years in the 1960s and 1970s, particularly in the behavioral sciences, has been the development and testing of a literal infinity of behavioral theories about structural change in work organizations, often lumped under the term "industrial psychology"; most of the theories were/are based on the assumption that wise organizational restructuring and people-development itself is an important component of economic organizational effectiveness in the marketplaces of contemporary capitalism. Almost all these approaches, when they have gone beyond the sheer theory stage, have been tested in real-world workplaces, usually with small populations of working men and women — such as 30 or 50 people — to discover what theories seem to work and which ones don't work. Until the late 1970s, such efforts were usually called "experiments" by their academic advocates, who like to use the language of the scientific method, and view their efforts as controlled experiments to prove or disprove the underlying sociological theory being tested. It is principally from literally thousands of such "experiments" here and abroad that today's QWL technology has evolved. A common term often applied to such experimentation is "hands on" experimentation, in which a small group of workers and managers in real-world offices or plants usually in one work location, under the direction of a scholar, are used to try out the theories, to prove their efficacy in real life, and to assess their replicative potential in other organizations.

To try to list even only the more dominant of these theories of what QWL is comprised would take a major paper — or rather a book — in itself. The theories range from those of Mayo's "Hawthorne effect" studies in the late 1920s down the years through such U.S. behavioral luminaries as Rogers, Maslow, Tamenbaum, Argyris, Herzberg, McGregor, Bennis, Likert and Beckhard, and such European pioneers as Thorsrud and Emery and Trist to today's leading new practical theorists like Vroom, Walton, Hackman, Lawler and Kanter, and on and on. From such theories came such popularly-accepted notions such as McGregor's "Theory X and Theory Y" management behaviors, and its outgrowth into the Blake-Mouton "managerial grid" ideas, Likert's 4-stage theories of growth, and so on. Here, suffice it to say, over simply, that most of the major basic

academic contributions to QWL development have come from the behavioral fraternity, almost all in or related to the psychological discipline called "organizational behavior", and almost all generally seeking to promote more effective and productive human interaction in work situations. A very few important contributions to today's QWL notions have come from industrial engineers, like Davis and Rubinstein, and some ergonomists — but almost always in some form of association with behavioral theorists.

In QWL development, many of the various early, late sixties and early seventies behavioral-based theories clustered around a now-discarded focus called job enrichment, or job enlargement, in which — purportedly — tasks and jobs are made more "human". Herzberg was a leader in developing this approach. Others clustered around new notions which Walton and others have called "work restructuring", in which assembly-line and particularly batch-process manufacturing work is redesigned to make it less onerous or tedious, usually through creating one form or another of work-team structures, for which alone there are a few dozen variants.

Still other theories clustered around the "sociotechnical system" advocated by Trist, Thorsrud, Davis and others, which views work processes as involving both social systems and technical systems, and views success in maximized integration of the two systems into one.

In the American workplaces in the 1970s, the outcomes from these thousands of experimental efforts have been varied, polyglot, and — with a few major exceptions — less than organization-wide, usually resident in one plant among many, one office among many. Because of their theoretical genesis, most were applied singly, and not in conjunction with (often necessary) others. Many organizations have tried the notion of alternative work scheduling, or what is called flexitime by many. Many organizations have tried one or more notions of new internal communications methodologies to bring better information more quickly to employees. As we've noted, today many are trying on the QC circle form for size, or a dozen or more other variants of process-based labor-management committees empowered with problem-solving authority; those collectively bargained in the 1980 steel industry contract are another example. Many have tried various intensive kinds of training in problem-solving, values and process management. Many new plants and offices have been carefully designed to inculcate into physical layout some of the interactive precepts for new work structures in the mass of theoretical base. Each and all of these, and dozens of others, fall under the QWL umbrella; each is an aspect of the basic QWL value-based, process-based approach.

5. TACTICS LAST; PLANNING FIRST

Certainly, judicious and cautious selection of the most appropriate tactical structures or cluster of structures from the ever-growing tactical smorgasbord available is a critically important skill needed for

effective QWL initiation and development. Like a doctor prior to prescribing therapy, before choosing which one or ones to apply, wise QWL practitioners first carefully analyze the specific problems, gripes, inadequacies and functional characteristics of a given organization or workplace — or preferably both — its technological adequacy and inadequacy, the nature, needs and complaints of its workers, the nature of existing problems in employee and/or union relations, its performance data like absenteeism, turnover, error rates, downtime, etc. Some companies call this in-depth analysis a "work climate" study. Experienced practitioners know that proper *choice* of remedial medicine — the selection of appropriate tactical QWL options or clusters of options — can make or break the effort. It is no overstatement that the greatest skill in QWL initiation is the selection of the most appropriate tactical structures best suited to each workplace, and that they will vary, remarkably, from workplace to workplace even in the same company. Nor is it an overstatement to say that built into the basic approach is the overriding belief that those most likely to prescribe the proper medicine are not outside experts, but rather the men and women who work there, and best understand what's currently less than perfect, and could best be improved.

Wise and thorough analysis, wise selection of where to begin, thoughtful selection of each of the right tactical approaches for each pilot site, proper selection and scheduling of those involved at initial and subsequent stages of development almost necessarily require planning preceding implementation of a tactical structure, or two or three.

Planning — careful and meticulous planning of each of major areas for QWL initiation — is a mandatory prerequisite to implementation in any well-managed work organization, and the larger the organization, the greater the planning needs.

In new-product introduction, new-plant building, acquisitions or mergers, or even strategic management reshuffling of authority, most managements require many months and hundreds of man-hours to meticulous planning of each, certainly including senior management approval before implementation begins. Yet until very recently, and perhaps with only a handful of significant exceptions, QWL enthusiasts in American organizations have jumped into the tactical area in random plants and offices with no overarching strategic plan, no top-level approvals, no real management or union understanding of what's involved, and in some cases, even without awareness by senior policy-makers that such efforts have been launched. No well-planned, tested, developed policy to make QWL become *a part of*, instead of — as has been so often the case — *apart from* organizational objectives is entered into. Such wrong-end-first initiatives aren't unlike a manufacturing manager who discovers new technology, and inserts it into his production process helter-skelter, without informing his superiors and without first viewing its application to the total production process.

Such a helter-skelter, unplanned,

unstrategized, hit-or-miss approach is the clear and present danger in QWL efforts today. For without thought-out and architected policies, selection of the right tactical options and the right places to initiate them will result in hasty, un-thought-out rushing to the nearest slick band-aid approach. And just such kinds of hasty rush to tactics seems to be more the rule than the exeption in U.S. industry today.

But often, even when strategic planning is wisely included, it has been our experience in instigating and observing scores of QWL initiations here and abroad, that far too often the QWL advocates in organizations consider the QWL goals as somehow separate from or irrelevant to overall organizational goals and objectives, in an apples or oranges kind of distinction. In a great deal of the Organizational Development literature, one reads again and again that the goal of QWL activities should be simply organizational change, with little or no reference to a better, tighter, more productive, better-performing and cost-effective organization with better labor relations. QWL objectives equated in terms of bottom-line performance are frequently missing. Yet clearly, if QWL does not provide such bottom-line improvements, it doesn't belong in a well-run organization.

As a result, in many, although by no means all, of the major QWL programs starting up in U.S. work organizations (under various aliases), there is frequently an unfortunate — and quite unnecessary — conspicuous mismatch between strategic QWL people objectives and the strategic business objectives of the organization itself. To state this mismatch problem differently, there is — and continues to be in perhaps the majority of organizations entering QWL — a serious and even dangerous absence of perceiving of better people-management as a critical business objective for U.S. work organizations in the 1980s.

To add fuel to the problem, most quality of work life efforts to date are still usually being advocated, launched and implemented by Personnel, or Human Resources branches of the organization. The result has been that often, QWL is viewed by operating managers as a Personnel or HRD notion, of little relevance to their bottom-line operating concerns, or even often as being counter to such concerns. As one line vice-president said to me about QWL in his company, until he understood the real contribution QWL technologies provide to bottom-line performance, he'd considered QWL as "another damned personnel gimmick" to pay lip service to, but basically forget about.

By strong contrast, when operating line managers learn, as they can and have, that effective people management (and that's what QWL is, after all) in the 1980s is a critical operational objective, as important as gaining market share or quality improvement or productivity improvement, then QWL is positioned strategically in the organization where it belongs: in the line, owned by the line, developed and nurtured by line officers, with Personnel and HRD as skilled *resources to* that ownership.

But when QWL — or contemporary people management — *is* perceived as an operational objective worth gunning for by the operational leaders of the organization, then something else happens strategically which is of critical importance to QWL success at the tactical level. The organizational leadership, hopefully from the chief executive officer down, becomes operationally *committed to* QWL's successful initiation and development. An "enabling climate" or "empowerment" by the line officers from the top down emerges; the organization becomes aware that the top brass is cheering for QWL success. In this enabled climate, management reward systems down to supervisor ranks change to include rewards for QWL achievements; so does the whole nature of executive succession planning. Middle managers who in an unenabled climate usually were fearful or cautious about initiating QWL tactical activities into their turf suddenly find the reverse to be true.

Yet perhaps more important, strategically, is the near-certainty that the absence of such commitment from the top down, or a non-enabled organization, probably will fail at both strategic *and* tactical levels. In several highly-promising tactical efforts we've been involved with, and in scores of others we've observed, where there has been no clear, unambiguous support and empowerment from the top down, the tactical QWL in efforts — plants and offices — however sound, chosen, appropriate and productive of signiticant improvements — have either remained closed off in the same small department or plant where they started, with no diffusion to the rest of the organization, or have withered and died from strategic malnutrition. Strategic support is mandatory to tactical achievement.

Yet, as AT&T's Board Chairman made crystal clear in his directive, one of the cardinal strategic qualities of effective QWL initiation in a company is that it neither can nor should be imposed, by fiat, from on high. Seeking an "enabling climate" — an opportunity to try — is imposition in reverse: it opens doors usually shut tight in traditional management styles. It keeps QWL voluntary, as it must be. But it rewards instead of punishes those who volunteer to make it work.

When QWL-enabled climates grow in conviction, experience and understanding of QWL's goals and potential contribution to running a better shop, QWL's tactical bottom-line contributions can and do grow in almost direct proportion. When one is *permitted* to win through better people management, one wins.

MANAGING AND IMPROVING THE QUALITY OF WORKING LIFE: A MANAGERIAL OVERVIEW

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INTRODUCTION

Improving the quality of working life (QWL) usually entails sweeping changes in the management practices of a firm. This observation is forcefully borne out by the proverbial resistance of managers to this type of action. To grasp the full extent of the changes involved and to fathom, moreover, the sometimes negative response of employees at all echelons of the organizational hierarchy, we must first understand the customary environment within the firm.

Since the beginnings of the Industrial Revolution, at least six schools of thought or theories of the firm as an organized unit have sprung up and developed side by side — namely the economic, formal or classical, interpersonal, decisional, analytical and political theories. In this paper we will briefly discuss these schools of thought, highlighting in each instance the impact of the changes connoted by a resolve to improve the quality of working life.

But first, what exactly does "quality of working life" mean?

QUALITY OF WORKING LIFE CONCEPT

Every idea has its origin and the meaning it bears cannot be divorced from that origin. The first official use of the expression "quality of working life" probably dates from the 1972 Arden House conference in the United States. Maslow, McGregor and Herzberg, among other authors, had already pioneered the field and blasted the poor working conditions prevailing in factories and offices alike. In Europe, Friedman, Touraine, London's Tavistock Institute researchers and Scandinavians such as Thorsrud and Engelstadt had also engaged in such work. As a result, there was a burgeoning of efforts to denounce Taylorism and reorganize the work world. Still, there was a real risk that more thought and effort might be channeled into proving the primacy of one work reorganization scheme over another than into improving situations as they actually existed.

For those more or less familiar with the work done at Tavistock, the quality of working life concept held out the possibility of clearing neutral ground where all previously scattered efforts could be aggregated and a theory possibly derived to hasten the achievement of change.

I digress here a moment to point out that quality of working life denotes not so much theoretical reflecting on the meaning of work as a resolve, coupled with practical efforts, to improve work. In other words, the concept implies the determination to take concrete action, even though ideal working conditions are still the subject of debate and study.

There are two distinct orientations to action taken in the name of QWL. On the one hand, there is a will to eliminate hazardous, uninteresting or asocial work, an orientation that is justified if we look at the basic human needs defined by Maslow. On the other hand, we have the search for interesting, stimulating, productive work that enriches the worker.

There are, furthermore, two broad avenues of change. The firm can opt for automation, closing its eyes to the lot of employees forced to learn a new trade or seek work elsewhere. Then again, without systematically rejecting progress, it can place the emphasis on job enrichment. It is this second solution, whether individual or collective, that best characterizes attempts to improve QWL. Typically, implementation of this alternative brings on genuine change, sweeping transformations within a business organization. Status dimensions are rebalanced and employees at the lower echelons gain more status in the firm, in spite of the sometimes strong resistance on the part of those holding positions of management, whether company or union. What is more, work itself is revalorized and there emerges a concept whereby the human being is seen as a producer before being seen as a consumer.

Improving the quality of working life thus means humanizing work so that the employee rediscovers a strong measure of dignity in his or her role as a producer. Achieving this humanization naturally calls for consideration of the entire spectrum of human needs postulated by Maslow. The image that best renders the true import of efforts to improve QWL is that of the craftsman, for whom work and private or social life are often symbiotic entities.

Striving to improve QWL also alters the business enterprise concept per se, with the firm evolving from a complex machine for producing goods and services into a life environment. The partitioning of the many facets of human activity is rejected: the employee refuses to be tagged a "human resource", for while the term clearly acknowledges his potential for action, it also relegates him to the status of a tool, a machine, a material good.

What changes are required to humanize work without detriment to the profit or production capability of the firm?

There are four identifiable areas of intervention. The *job per se* must be modified so that the employee may

use his skills, learn, preserve a degree of autonomy or, more simply, bring intelligence, affectivity and initiative into play on the job. *Work participation* must be fostered — especially as it relates to direct local decisions that affect the employee's job, but also as it relates to options that will, in the longer term, impact on modeling his place in the firm. The *physical environment* must be reordered so that the worker can preserve his physical and mental integrity within the organization. Lastly, the *link and passage between work and private life* must be facilitated so that neither realm is sacrificed to the other. In sum, the employee becomes a person in the full sense of the word and the firm is seen as a life environment.

Although the changes discussed here affect primarily the workers, their impact is soon felt on the hierarchy, whose members are profoundly affected at seeing the firm debureaucratized and the status gap narrowed. These are precisely the changes that we shall now consider.

ECONOMIC SCHOOL

Starting back in the 18th century, Adam Smith, then Charles Babbage argued a theory of the enterprise based on the organization of labour by management. The employee, initially a craftsman, became a resource amenable to the will of the owner-manager, who in turn defined the employee's action so as to derive maximum profit from scale economies through extreme division of labour and job specialization. Work, reduced to its simplest expression, became but a means of subsistence, with the weight of management ensuring close compliance with the rules of production.

Market dynamics were to take over as the driving force of the firm, which became a production tool, a well-oiled machine whose superfluous or worn parts could be readily scrapped. Not surprisingly, working conditions under that regime were deplorable. After all, the idea was to *lease* the worker's services for a given term! As business organizations were fairly small at the time, there were few rungs on the hierarchical ladder. The manager made the production decisions, the foreman supervised the workers, the workers simply produced!

To be sure, the production apparatus is not that simple or the worker so totally dominated in the modern-day business enterprise. Yet and still, a number of other characteristics from those bygone times are quite prevalent in today's workplace. While there is talk of a firm's social responsibility, it is first and foremost the market laws of supply and demand that regulate the pace of operations, with the firm still regarded as a tool for producing goods and services. And the employee's presence is still explained by the pursuit of monetary gain, which depends in turn on the "market value" of the skills which the worker offers and the firm seeks. Although the monetization of human relations has had its ups and downs as a concept, until recently it was deemed feasible, if not indeed desirable, to provide monetary remuneration as a means of offsetting occupational hazards and their ill effects on workers' health.

Then, too, there still exist managerial *rights*, which, following the advent of trade unions, are being eroded piecemeal in the course of sometimes virulent labour-management confrontations. As a result, positions are polarized, the perception of labour and management interests as diametrically opposed is strengthened, with each faction seeking an ever larger share of the profits.

The QWL concept collides head-on with this view of the enterprise and the worker. As the firm is no longer just a tool but indeed a life environment, the job motivation factors resemble life motivation factors and the basic status distinctions between the lower and upper echelons of the organizational hierarchy disappear. Management enjoys no sacred rights: in theory, all facets of company life are opened up to the workers, with access no longer contingent on affiliation with ownership but on skill and ability.

FORMAL SCHOOL

The computations which economic theorists left to the market's invisible hand, helped along by basic common sense, seemed insufficient to engineer Frederick Winslow Taylor. At the turn of the century, Taylor introduced the scientific movement as a replacement for the economic tradition. Reaffirming the dichotomy between decision makers and producers, he perceived the hierarchy as a team of scientists observing workers on the job, eliminating superfluous actions, modifying production tools to reckon with physiological capabilities, and relying on the pursuit of gain to stimulate worker effort and simultaneously underscore the communality of goals at the top and bottom of the ladder. That concept soon culminated with Ford's assembly line, where repetitive gestures already heralded the replacement of humans by machines.

It remained to tackle the sphere of management in like fashion, i.e., to codify and then systematize operations at that level. The Frenchman Henri Fayol broached that task. About 1916 he proposed a management theory centred on the performance of functions such as purchasing and selling. Fayol's innovative input was the identification of a new function of management, namely the administrative function, an ongoing process to which all managers contribute. The process is broken down into elements of administration now labelled planning, organization, resource allocation, management and control. Fayol went on to propose fourteen principles of administration — including unity of command and the correlation between authority and responsibility — that gave his management philosophy concrete form.

Ultimately, both Fayol and Taylor were favourably received in academic and business circles, their theories being incorporated into the very structure of business enterprises. What large company does not boast a planning or control department, a methods or personnel division?

A comprehensive organizational theory of the firm was propounded by Max Weber, who called his

proposed structure an "ideal organizational model". His bureaucratic model sets forth formalization and specialization of skills and tasks, a system of procedures and rules and the centralization of decision-making as means to secure objectivity of decisions and protection from the arbitrary. This is obviously a heavy type of structure, better suited for stable environments in which codifying activities may prove profitable. As there is no entirely stationary environment, it has become customary to speak of bureaucratization rather than bureaucracy, a trend in evidence particularly in large or long-standing enterprises.

Improving the quality of working life implies partial rejection of this school of thought. First of all, it repudiates the distinction between management and the lower echelons. Through the impetus of job enrichment, for instance, it proposes that planning, organizing, managing and controlling become tasks which are shared by all elements of the organization. It further imposes a view of the human being as something more than an aggregation of codifiable actions. In order to realize the project so dear to Taylor, the firm must now reckon with the worker's mental and affective universe by ordering job conditions in a way that ensures interpersonal employee relations, which is feasible only if the job of one employee has an impact on those of his fellow workers.

The QWL ideal is thus the antithesis of bureaucracy. The very factors which were supposed to make the enterprise an effective entity — namely, recruitment on the sole basis of technical competence, accompanied by isolation of individual elements to obviate undue influence — look more like conditions that will minimize effort and bring about disinterest, passivity and rejection of change — ossification of the enterprise, in short. As can be seen, improving the quality of working life is tantamount to debureaucratizing the firm, stripping management of its exclusive rights and making managers of all employees.

INTERPERSONAL SCHOOL

In the late 1920s Harvard researchers challenged the physicalist concept of human responses to work dear to Taylor and even to economic theorists. Experiments conducted at Western Electric's Hawthorne plant were to reveal a number of behaviour traits displayed by the employees:

- the employees reacted not only to the physical characteristics of their work environment but to the social characteristics as well;

- they formed groups within the work environment, those groups modifying their perceptions and attitudes as well as their behaviour;

- they did not act as though seeking to maximize gains over the short term; instead they paced their job activities to reckon with group pressures or to enhance job security.

Upon discovering the complexity and social character of job motivations, the firm embarked on a vast

program of interviews, which, it should be noted, were geared more to drain off tensions and relieve frustrations than to reap tangible changes in the work environment. And so the human relations movement was born, giving rise to a host of worker profiles that drew inspiration from the disciplines of psychology and sociology.

Lewin, then Morse and Reimer, showed the concomitance of participation and personal commitment as far as decisions go. Maslow, McGregor, and then Argyris propounded a humanistic vision of man at work, group dynamics proposed to liberate the affectivity of managers and Herzberg showed that worker satisfaction did not hinge solely on broadening the bounds of the job but on enriching it as well, without overlooking such hygiene factors as fringe benefits or the physical job environment which may captivate the employee's attention. From that point on, the movement relinquished the "human relations" label for that of "human resources".

It should be noted that the idea of improving the quality of working life does not reject, but instead incorporates in, the contribution of this school of thought. In certain instances, the group is even accepted as the basic organizational component. On the other hand, two historical tenets of this theory are rejected. First, the QWL idea runs counter to the manipulative concept which some employers sought to impose through psycho-sociology. A pat on the back, an informal style and lending an attentive ear once served as inexpensive devices for taming the firm's workers: they were designed to pad the heavy step, soften the hand of management, which remained rigid and distant as always. Improving the quality of working life, on the contrary, relies on openness of the parties to the possibility of genuine reciprocal influence. Any inclination towards manipulative behaviour dooms the QWL effort to failure.

Second, the QWL idea rejects the designation of working humans as "resources", for aceptance of the term "human resources" insensibly paves the way for shifting to human beings management practices that were developed with material and financial resources in mind. The QWL concept makes the person — not the human resource — the chief component of the enterprise.

I might add that this theory borrows from processes of change known collectively as organizational development, processes which originated with the work of Kurt Lewin.

DECISIONAL SCHOOL

In the early 1950s Simon, followed by Cyert and March, made decision making the hub of management's preoccupations. Rejecting the economic theory that had the employee or the manager seeking to maximize the profitability of his activities, they coined the notion of satisficing. This had the employee confronted with but a few alternatives from which to choose one that was, for him, the best compromise between sometimes contradictory objectives. That decision maker, having only a limited repository of biased information at his disposal, could hardly be certain of making what an outside observer would have qualified as the best choice.

The human being was gradually modeled into a decision machine comparable to a highly sophisticated computer responding to stimuli structured by the organization. With this theory, the organizational hierarchy, departmentalization and the limitation of responsibilities (and authority) are all devices that prevent overloading the human computer, while allowing him to focus as fully as desired on solving the problems within his jurisdiction. To be sure, decentralization is recommended, but here again, the organizational circuits must be cleared and reserved for the transmission of major communications.

Both the primitive mechanistic views of the first economic theorists and Taylorism are replaced here by a concept of the human being which, though just as reductionistic, is also far more sophisticated. The existence of groups is acknowledged but they are seen as coalitions confronting one another over organizational benefits and resources. If there is any human incentive coupled with the pursuit of gain, it is the pursuit of power, the satisfaction of other needs being eclipsed by theoretical and practical considerations.

Improving the quality of working life is not feasible if the enterprise continues to be viewed as a battlefield where each army is waging war for the "slack". While recognizing the existence of diverging interests, the QWL concept affirms the primacy of converging interests. From here on, cooperation and conflict must coexist, although this need is glossed over at times. It also rejects the primacy of cognitive factors over emotive factors and recognizes the valorizing dimension of human activity.

Actually, the decisional theory directs little or no attention to the worker, focusing instead on managers and management. Implicitly, decision-making becomes the prerogative of management, a tenet which the QWL philosophy obviously refutes. The admittance of employees at the lower levels as legitimate members of coalitions thus portends probable upheaval in the rules of the game, with a multiplication of initiative and decision "centres".

ANALYTICAL APPROACH

After the Second World War, business organizations came to realize the potential applications of mathematics to organizational theory and models were soon being built to manage inventories or investment portfolios. Indeed, none of the traditional functions of the firm escapes the influence of rationalization. When it comes to selecting advertising media, linear programming comes into play. If career goals are being considered, Markov's chains will help make matters clearer. And so on.

Beyond the local use of the mathematical tool, there is a growing realization of the interrelatedness of the many activities and events that go into the making of an organization.

Von Bertalanffy formulated a systematic concept of these interrelationships and the systemic approach was born. Having started

out as a tool of reflection that uncovered the existence of such phenomena as time delays, inertia and the automatic amplification or reduction of divergences, the *systemic concept*, too, was worked into mathematical models. The DYNAMO model, developed at MIT by Forrester, was used to unravel the skein of interrelationships between, say, the different facets of the life of a newspaper. The systemic appraoch further revealed that systems may produce perverse effects, in other words, impacts which are generated by the complexity of the interrelationships and escape traditional reasoning.

In this perspective the enterprise remains a tool for producing goods and services. This critique is carried to the limit with certain theorists, such as Forrester, for whom the firm has lost all human content and consists solely of networks of flows of energy and information marked by crossing, delays, amplification and detours.

Improving the quality of working life is, on the other hand, forcefully asserting the importance of the human being as an organizational component. It means knocking the experts off their pedestals and having them share their knowledge and skills with the employees, who in turn share with them their intimate knowledge of actual situations within the organization. It means believing that the maximum performance of the business does not depend solely, or even sometimes mainly, on the maximization of the isolated ordering of technical flows, but requires close joint consideration of organizational duality, i.e., the social and technical dimensions of the enterprise. In truth, this attitude stems mainly from use of the sociotechnical approach to improve the quality of working life. This approach consists of an attempt to fit together the systemic concepts of the enterprise and the contributions of social psychology. Formulated by Trist in the early 1950s, it has since scored marked success all over the Western world, particularly in manufacturing industries and large service enterprises.

POLITICAL APPROACH

The political theory of the firm, already found in the work of Cyert and March, really got off the ground in the early 1960s. Based on the study of decision processes, it suggests that power-seeking is the primary propellant of managerial action. Decisions are made almost as an aside, each manager trying to safeguard his zone of influence and lay hold to part of that of his fellow managers. Under the thrust of the many "deals" that must be struck before decisions are made or implemented, the "rationality" of those decisions gradually vanishes. There is a reversal of perspective, as it were. The organization is seen as serving managers locked in mutual competition. Career goals become central and a new type of behaviour emerges wherein the Gamesman supercedes the Organization Man. Life within the organization becomes a matter of one chess game after another, with the players seeking to lay down the rules of the game.

This picture dynamizes the work pioneered by Berle and Means, then solidified by Galbraith. The voice of

ownership is virtually extinguished and professional managers unequivocally take on the responsibility of determining company policy.

This school of thought, too, runs counter to the QWL concept, which recognizes the significance of the social content of work, stresses the importance for employees at all echelons of the organization to perform tasks that are useful and sees the enterprise not as a chessboard but as a tool and a life environment. The concept also recognizes the power goal as a motive, regarding it not as the ultimate motive for action but as an important force in some of the actions of both corporate and union management.

Given this recognition, ample room must be left in the design of a QWL project to identify areas and plays of power and provide for the security of management. Indeed, implementation of the QWL concept strips both lower managers and union representatives of their usual means of pressure. The lower managers become trainers, technical consultants or long-term job unit superivsors. The union representatives guarantee the employees technical support through dialogue with management and consultation of the information distributed by the firm. They are much more concerned with upholding the spirit, rather than the letter, of collective agreements, which, it may be noted in passing, are far less voluminous documents than they once were.

SUMMARY

In sum, efforts to improve the quality of working life spell sweeping changes in all the modern-day management concepts sustained more or less knowingly by managers. The sometimes stubborn resistance of managers, employees at the lower levels, and union leaders should come as no surprise, for the QWL concept pretty much compels them to reconsider their biases and habits. Insofar as the QWL concept increasingly falls in with the needs of the organization and of its members, fostering flexible response, quality operation, and job interest, the firm should give this notion ample room and revise its prevailing notions accordingly, however comfortable they may be.